City of Lemon Grove Demands Summary
Approved as Submitted:
Al Burrell, Interim Financial Consultant
For Council Meeting: 04/17/18

ACH/AP Checks 03/27/18-04/09/18	723,817.23
Payroll - 03/27/18	129,216.24
Total Demands	853,033.47

CHECK NO	INVOICE NO	VENDOR NAME	CHECK DATE	Description	INVOICE AMOUNT	CHECK AMOUNT
ACH	53502472	WEX Bank	03/27/2018	Fuel - Fire Dept - Feb'18	673.12	673.12
ACH	Mar18	Southern CA Firefighters Benefit Trust	03/29/2018	LG Firefighters Benefit Trust - Mar'18	2,630.55	2,630.55
ACH	Mar27 18	Employment Development Department	03/29/2018	State Taxes 3/27/18	6,807.25	6,807.25
ACH	Mar14-27 18	Calpers Supplemental Income 457 Plan	03/29/2018	457 Plan 3/14/18-3/27/18	6,296.54	6,296.54
ACH	Refill 3/29/18	Pitney Bowes Global Financial Services LLC	03/30/2018	Postage Usage 3/29/18	250.00	250.00
ACH	Mar27 18	US Treasury	03/30/2018	Federal Taxes 3/27/18	22,249.32	22,249.32
ACH	Mar18	Wage Works	03/31/2018	FSA Reimbursement - Mar'18	834.34	834.34
ACH	Mar18	Dharma Merchant Services	04/02/2018	Merchant Fees - Mar'18	15.00	15.00
ACH	Mar18	Power Pay Biz/Evo	04/02/2018	Online Credit Card Processing - Mar'18	65.86	65.86
ACH	Feb18	Chase	04/02/2018	Workers' Comp Claims - Feb'18	1,159.28	1,159.28
ACH	Apr18	Pers Health	04/03/2018	Pers Health Insurance - Apr'18	55,509.06	55,509.06
ACH	Mar18	Authorize.Net	04/03/2018	Merchant Fees In-Store & Online - Mar'18	46.85	46.85
ACH	8219220	LEAF	04/04/2018	Ricoh C3502 Copier System-PW Yard - Mar'18	160.51	160.51
ACH	Mar18	Chase	04/04/2018	Workers' Comp Claims - Mar'18	9,919.05	9,919.05
ACH	Feb28-Mar27	California Public Empl Retirement System	04/09/2018	Pers Retirement 2/28/18-3/27/18	66,391.97	66,391.97
9271	3/12/2018	AT&T	03/28/2018	Phone Service- 2/13/18-3/12/18	81.48	81.48
9272	848196-9	BJ's Rentals	03/28/2018	Propane	13.58	23.39
	848494-9			Propane	9.81	
9273	1154973-IN	Boot World Inc.	03/28/2018	Work Boots - PW Staff	194.81	194.81
9274	82018869-00	Bridgestone Hosepower LLC	03/28/2018	Brackets to Prevent Abrasion - 420E Backhoe -PW/Streets - 3/7/18	966.62	966.62
9275	14603-997496	Cable Pipe & Leak Detection Inc.	03/28/2018	Sheriff Stn/Lee House/Museum - Water Leak Survey	280.00	280.00
9276	3/27/18	California State Disbursement Unit	03/28/2018	Wage Withholding Pay Period Ending 3/27/18	161.53	161.53
9277	18397493	Canon Financial Services Inc.	03/28/2018	Canon Plotter Contract Charge 3/20/18-4/19/18	144.00	144.00
9278	694469495	Cintas Corporation #694	03/28/2018	Janitorial Supplies - 3/22/18	213.06	213.06
9279	FRS0000084	City of El Cajon	03/28/2018	Overtime Reimbursement - 2/27/18	1,171.75	
	FRS0000084			Overtime Reimbursement - 2/28/18	1,115.13	
	HCA0000206			HCFA Assessments - QTR 4 FY17/18	39,070.35	41,357.23
9280	35099	Colantuono, Highsmith & Whatley, PC	03/28/2018	Legal Svcs - thru Feb '18	198.60	198.60
9281	SB2018-01	County of San Diego- OES	03/28/2018	2000 Sandbags	500.00	500.00
9282	0320182305	Domestic Linen- California Inc.	03/28/2018	Shop Towels & Safety Mats 3/20/18	73.60	73.60
9283	12936	ECS Imaging	03/28/2018	Laserfiche Annual Renewal - FY19	5,680.00	5,680.00
9284	3/12-15/18	Esgil Corporation	03/28/2018	75% Building Fees- 3/12/18-3/15/18	4,545.56	4,545.56
9285	Garcia	Garcia, Marla	03/28/2018	Refund/Garcia, Marla/Deposit - LBH- 3/10/18	400.00	400.00
9286	109189975	Globalstar USA, Inc.	03/28/2018	Satellite Service 2/16/18-3/15/18	166.23	166.23
9287	0028704-IN	Hinderliter De Llamas & Associates	03/28/2018	Sales Tax Audit Services - Qtr 3 2017	2,236.91	3,136.91

	0028704-IN			Contract Services - Sales Tax - Qtr 1	900.00	
9288	10571	Infrastructure Engineering Corporation	03/28/2018	Prof Svc: LGA Realignment 1/27/18-2/23/18	17,748.59	17,748.59
9289	Refund/J&G Inv	J & G Investments	03/28/2018	Refund/J & G Inv/Sewer Charge Overpymt/3307 LGA 2014-2018	28,328.02	28,328.02
9290	LemonTree	Lemon Tree on Lincoln, LLC	03/28/2018	Refund/LemonTree on LincolnLLC/Busi License Overpymt -1/17/18	69.00	69.00
9291	1455409	Liebert Cassidy Whitmore	03/28/2018	Prof Svcs: LE050-00003 thru 2/28/18	13,460.00	13,460.00
9292	Feb 18	Lounsbery Ferguson Altona & Peak LLP	03/28/2018	General 01163-00002 - Feb '18	15,092.34	32,346.62
	Feb 18			Code Enforcement 01163-00003 - Feb '18	2,823.03	
	Feb 18			Cost-Share Agreement 00023 - Feb '18	1,045.80	
	Feb 18			01163-00028 - Feb '18	11,320.37	
	Feb 18			01163-00039 - Feb '18	1,071.17	
	Feb 18			01163-00040 - Feb '18	678.51	
	Feb 18			01163-00041 - Feb '18	315.40	
9293	4413908	Mallory Safety and Supply, LLC	03/28/2018	HiVisibility Vests/Drivers Gloves/Coveralls/Cleated Boots	270.90	270.90
9294	IN1212914	Municipal Emergency Services Inc.	03/28/2018	Fire Shelter/Spyder Gear Wildland Packs	652.74	652.74
9295	81975	NV5, Inc.	03/28/2018	LGA Realignment- Construction Support Svcs thru 11/30/17	5,389.75	5,389.75
9296	Apr-18	PLIC- SBD Grand Island	03/28/2018	Dental Insurance -Apr18	4,517.70	4,517.70
9297	84619855	SiteOne Landscape Supply, LLC	03/28/2018	Irrigation Supplies/Rotors/PVC Sprinkler Attachments	113.87	172.27
	84627800			Irrigation Supplies/Rotors - Berry St Park	58.40	
9298	488846	South Coast Emergency Vehicle Services	03/28/2018	E10 Service/Repair - Driver Seatbelt Alarm/Driver's Scene Lights	1,073.50	1,073.50
9299	00062303	The East County Californian	03/28/2018	Public Hearing Notice - Downtown Specific Plan (DSP)	336.00	651.00
	00062325			Public Hearing Notice - SanDAG Biennial Proj List 3/15/18	42.00	
	00062529			Ordinance #448 -Planning Comm Summary Muni Code Notice3/22/18	119.00	
	00062558			Public Hearing Notice - Admin Appeal MMD 3/22/18	154.00	
9300	Mar27 17	Vantage Point Transfer Agents-457	03/28/2018	ICMA Deferred Compensation Pay Period Ending 3/27/18	580.77	580.77
9301	9803428233	Verizon Wireless	03/28/2018	City Phone Charges- 2/13/18-3/12/18	326.11	326.11
9302	71752536	Vulcan Materials Company	03/28/2018	Asphalt/SS1H 4.5 Gallon Bucket	187.59	708.34
	71757815			Asphalt	105.27	
	71761064			Asphalt/SS1H 4.5 Gallon Bucket	149.77	
	71763774			Asphalt	114.00	
	71763775			Asphalt/SS1H 4.5 Gallon Bucket	151.71	
9303	GHC00260632	John Lee	03/28/2018	Claim Settlement/GHC0020632	2,879.41	2,879.41
9304	39608	A Aaron Lock & Key	04/04/2018	Keys - Comm Ctr	120.58	923.76
	39621			Locks & Keys - Code Enforcement	803.18	
9305	76567	Anthem Blue Cross EAP	04/04/2018	Employee Assistance Program - Apr 18	165.00	165.00
9306	3/22/2018	AT&T	04/04/2018	Backup City Hall Internet- 2/23/18-3/22/18	84.00	84.00
9307	5656170471	AutoZone, Inc.	04/04/2018	Windshield Wiper Blades - LGPW #23	9.68	195.86
	5656176886			Duralast Gold Battery - LGPW #17	135.68	
	5656179384			Diesel Exhaust Fluid/Wiper Fluid/Motor Oil - LGPW #32	50.50	
9308	31443	Aztec Landscaping Inc.	04/04/2018	Landscape Mgmt Svc Jan '18	9,629.00	19,258.00
	31584			Landscape Mgmt Svc Feb '18	9,629.00	
9309	4679224	Bearcom	04/04/2018	Portable Radios Monthly Contract 3/22/18-4/21/18	150.00	150.00
9310	849577-9	BJ's Rentals	04/04/2018	Propane	13.20	53.47
	849857-9			Propane	11.99	
	850162-9			Propane	13.20	
	850469-9			Propane	15.08	
9311	18441086	Canon Financial Services Inc.	04/04/2018	Canon Copier Contract Charge 4/1/18	642.60	642.60
9312	338	City of Chula Vista	04/04/2018	Animal Control Services- Jul '17	16,923.00	137,405.14
	338			Animal Control Services- Aug '17	16,922.00	
	338			Animal Control Services- Sep '17	16,923.00	
	338			Animal Control Services- Oct '17	16,923.00	
	338			Animal Control Services- Nov '17	16,923.00	
	338			Animal Control Services- Dec '17	16,923.00	
	340			Animal Control Services- Jan '18	16,923.00	
	341			Animal Control Services- Feb '18	16,923.00	
	ACSERV-Aug 2017			After Hours Calls- Aug '17	391.64	
	ACSERV-Aug 2017			Mileage & Fuel for Animal Control Veh- Aug '17	781.13	
	ACSERV-Jul 2017			After Hours Calls- Jul '17	441.64	
	ACSERV-Jul 2017			Mileage & Fuel for Animal Control Veh- Jul '17	657.73	
	ACSERV-Jul 2017			Credit/Impound Fees/Animal Control Services- Jul '17	-250.00	

9313	FRS0000087	City of El Cajon	04/04/2018	Overtime Reimbursement -3/21/18	585.87	4,141.91
	FRS0000087			Overtime Reimbursement - 3/18/18	1,115.13	
	FRS0000087			Overtime Reimbursement - 3/18/18	1,200.89	
	FRS0000087			Overtime Reimbursement - 3/19/18	1,240.02	
9314	2044	Clothing International, Inc.	04/04/2018	Protective Clothing - PW- Shirts	215.33	215.33
9315	18CTOFLGN09	County of San Diego- RCS	04/04/2018	800 MHZ Network - Mar'18	2,907.00	2,907.00
9316	3/19/2018	Cox Communications	04/04/2018	Phone/PW Yard/2873 Skyline- 3/19/18-4/18/18	212.56	216.41
	3/18/2018			City Manager/Copy Room Fax Line- 3/18/18-4/17/18	3.85	
9317	020118560	DAR Contractors	04/04/2018	Animal Disposal- Feb '18	162.00	162.00
9318	3/19-22/18	Esgil Corporation	04/04/2018	75% Building Fees- 3/19/18-3/22/18	5,471.25	10,471.16
	3/26-29/18			75% Building Fees- 3/26/18-3/29/18	4,999.91	
9319	Reimb 3/28/18	Evans, Miranda	04/04/2018	Reimb: Postage for DOJ Grant Application	58.65	58.65
9320	54410	Global Power Group, Inc.	04/04/2018	Maintenance - Fuel Gauge- Generator/Fire Station	114.96	481.96
	54411			Preventive Maintenance - Generator/Fire Station	367.00	
9321	AR009307	Grossmont Union High School District	04/04/2018	Spring Daycamp Flyers & Egg Hunt Flyers	1,631.10	1,631.10
9322	1449	Janazz, LLC SD	04/04/2018	IT Services- City Hall- Mar '18	2,600.00	2,600.00
9323	Jan 18	Knott's Pest Control, Inc.	04/04/2018	Re-issue/Monthly Bait Stations- Civic Ctr - Jan 18	60.00	105.00
	Jan 18			Re-issue/Monthly Bait Stations- Sheriff - Jan 18	45.00	
9324	IN1212910	Municipal Emergency Services Inc.	04/04/2018	Performance Polo Shirt - Fire	38.09	38.09
9325	605033003	Nichols Consulting Engineers, CHTD	04/04/2018	Prof Svc: Pavement Mgmt Prog 2018 Update thru 2/28/18	15,460.00	15,460.00
9326	147443	Pacific Sweeping	04/04/2018	Street Sweeping/Parking Lot/Power Washing/Bus Shelters - Feb '18	6,655.15	6,655.15
9327	65327	Penske Ford	04/04/2018	LGPW #07 -'14 Ford Patch Truck F450-Oil Change/Air Filter/Wipers	125.08	125.08
9328	PD-37866	Plumbers Depot Inc.	04/04/2018	Sewer Camera - Wheels	470.73	470.73
9329	3500	Qual Chem Corp.	04/04/2018	Graffiti Remover	788.39	788.39
9330	3/22/2018	SDG&E	04/04/2018	3225 Olive- 2/19/18-3/20/18	118.48	353.25
	3/22/2018			3500 1/2 Main- 2/19/18-3/20/18	234.77	
9331	84568564	SiteOne Landscape Supply, LLC	04/04/2018	Herbicide/Roundup Promax	86.85	355.97
	84568564			Grounds Maintenance Supply/Lesco Tracker Max Spray	32.99	
	84854345			Herbicide/Roundup Promax/Speedzone Herbicide Red	236.13	
9332	Apr2018	Standard Insurance Company	04/04/2018	Long Term Disability Insurance - Apr18	1,638.40	1,638.40
9333	Apr-18	Sun Life Financial	04/04/2018	Life Insurance - Apr18	120.06	120.06
9334	3296541-CA	US HealthWorks Medical Group,PC	04/04/2018	DMV BAT Medical Exam - 3/14/18	113.00	113.00
9335	9803428820	Verizon Wireless	04/04/2018	Mobile Broadband Access- 2/13/18-3/12/18	76.02	454.87
	9803883656			MDC Engine Tablets- 2/21/18-3/20/18	190.07	
	9803428234			PW Tablets- 2/13/18-3/12/18	188.78	
9336	71764357	Vulcan Materials Company	04/04/2018	Asphalt	190.39	965.65
	71766595			Asphalt/SS1H 4.5 Gallon Bucket	245.35	
	71771121			Asphalt/SS1H 4.5 Gallon Bucket	189.53	
	71771122			Asphalt	152.79	
	71771123			Asphalt/SS1H 4.5 Gallon Bucket	187.59	
9337	2016.04-020	West Coast General Corporation	04/04/2018	LGA Realignment Proj- 2/1/18-2/28/18	174,103.80	174,103.80
					723,817.23	723,817.23

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.B
Dept. City Attorney

Item Title: Waive Full Text Reading of All Ordinances on the Agenda.

Staff Contact: James P. Lough, City Attorney

Recommendation:

Waive the full text reading of all ordinances included in this agenda. Ordinances shall be introduced and adopted by title only.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Categorical Exemption, Section
☐ Negative Declaration
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

None.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.C
Mtg. Date April 17, 2018
Dept. Public Works

Item Title: **Rejection of Claim**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Recommendation:

That the City Council rejects a claim submitted by Barrington Steven Brown.

Item Summary:

On March 19, 2018, the City of Lemon Grove received a timely submitted claim from Barrington Steven Brown. After reviewing and investigating the claim, staff recommendation is that it be rejected.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption, Section
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

None.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.D
Mtg. Date April 17, 2018
Dept. Public Works

Item Title: **Rejection of Claim**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Recommendation:

That the City Council rejects a claim submitted by the Law Office of Michael John Majdick on behalf of Carla Pastore Hall.

Item Summary:

On March 13, 2018, the City of Lemon Grove received a timely submitted claim from the Law office of Michael John Majdick on behalf of Carla Pastore Hall. After reviewing and investigating the claim, staff recommendation is that it be rejected.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption, Section
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

None.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.E
Mtg. Date April 17, 2018
Dept. Public Works

Item Title: **Rejection of Claim**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Recommendation:

That the City Council rejects a claim submitted by Paulette Martinez.

Item Summary:

On February 26, 2018, the City of Lemon Grove received a timely submitted claim from Paulette Martinez. After reviewing and investigating the claim, staff recommendation is that it be rejected.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption, Section
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

None.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.F.
Mtg. Date April 17, 2018
Dept. Development Services

Item Title: **Fifth Amendment to Option Agreement Between City of Lemon Grove and the San Diego Community Land Trust for 8084 Lemon Grove Way**

Staff Contact: David De Vries, Development Services Director

Recommendation:

Adopt a resolution amending the Option Agreement to provide a fifth six-month time extension and other amendments.

Item Summary:

In September 2014, the City and San Diego Community Land Trust (SDCLT) entered into a Purchase Option Agreement for the eventual sale of 8084 Lemon Grove Way which is Lemon Grove Housing Authority owned land. The Purchase Option Agreement required SDCLT to complete certain milestones by specified dates. These milestones ensure that SDCLT has progressed towards the purchase of 8084 Lemon Grove Way. The fourth milestone—securing building and site improvement permits and securing, as to form, the 99-year ground lease proposed to be used as the conveyance of Affordable Unit interests—was to be completed by May 19, 2016 and the Fourth Option Amendment extended this date to April 19, 2018. The ground lease has been approved as to form. The applicant is working with City staff and other agencies to achieve this milestone as it relates to securing permits; however, they will be unable to meet the specified deadline. City staff recommends that the City Council adopt a resolution amending the Option Agreement to provide a fifth time extension.

Fiscal Impact:

None.

Environmental Review:

- ☒ Not subject to review
- ☐ Negative Declaration
- ☐ Categorical Exemption, Section
- ☐ Mitigated Negative Declaration

Public Information:

- ☒ None
- ☐ Newsletter article
- ☐ Notice to property owners within 500 ft.
- ☐ Notice published in local newspaper
- ☐ Neighborhood meeting

Attachments:

A. Staff Report
B. Resolution Amending the Option Agreement

Attachment A

LEMON GROVE CITY COUNCIL
STAFF REPORT

Item No. 1.F.

Mtg. Date April 17, 2018

Item Title: **Fifth Amendment to Option Agreement Between City of Lemon Grove and the San Diego Community Land Trust for 8084 Lemon Grove Way**

Staff Contact: David De Vries, Development Services Director

Discussion:

On September 22, 2014, the City and San Diego Community Land Trust (SDCLT) entered into a Purchase Option Agreement for the eventual sale of 8084 Lemon Grove Way which is owned by the Lemon Grove Housing Authority (City Council Resolution No. 2014-3284 dated September 16, 2014). A nine unit housing development is currently entitled on the subject property based on approvals in 2007 and amendments approved on March 1, 2016. The Purchase Option Agreement allows SDCLT to purchase the property for one dollar per unit in exchange for constructing the units and restricting them to moderate income households included in their 99-year ground lease mechanism. SDCLT is required to achieve certain milestones by specified dates. These milestones ensure that SDCLT has done their due diligence to determine whether the project is feasible.

The first milestone—submission of a business plan—was to be achieved by December 2014. The business plan was submitted on December 1, 2014 and the City Council reviewed the business plan and provided feedback to SDCLT on January 6, 2015.

The second milestone—securing entitlements and construction financing—was to be achieved by September 2, 2015 and October 19, 2015, respectively. Minimal revisions to the approved Tentative Map (TM0052) and Planned Development Permit (PDP06-09) were proposed and amendments to the floor and elevation plans were approved by the City Council on March 1, 2016. Entitlements for both the tentative map and planned development permit have been secured since there has been substantial progress towards the issuance of a final map, grading plan, improvement plan and building permits for the completion of the project. On October 17, 2017, as a part of the fourth amendment to the option agreement, the option agreement was amended to allow SDCLT to secure financing a minimum of 10 days prior to exercising the option.

The third milestone—submit building and site improvement applications—was to be achieved by April 4, 2016. This milestone requires submittal of development plans and technical studies required for a grading permit, building permit, landscape permit, and a final map. Appropriate plans and reports include building and site construction plans, grading plans, a landscape documentation package, an acoustical analysis, a Storm Water Quality Management Plan and a hydrology report, and potentially other necessary reports, studies, and plans in accordance with City Council Resolutions 2694 and 2695, which approved TM0052 and PDP06-09 respectively. A “Hold Harmless” agreement was required for each submittal. In February of 2016, SDCLT submitted the necessary permit applications achieving the third milestone.

The fourth milestone—securing building and site improvement permits and securing approval as to form of the 99-year ground lease proposed to be used as the conveyance of Affordable Unit interests—was to be achieved by May 19, 2016; but is now extended to April 19, 2018. This

requires that all permits applied for in the third milestone are secured (permits issued and improvements secured either through a bond or cash deposit with appropriate fees paid). At this time, SDCLT recently submitted their fifth resubmittal for engineering permits and corrections from the City have been provided to the applicant. There are also corrections from stormwater and engineering on the building permit submittal that are required to be resolved prior to issuance of building permits. City staff estimates all of the needed engineering and building permits in the fourth milestone should be able to be issued and secured within two to four months assuming corrections are addressed. City staff recommends that a fifth six-month extension to the Option Agreement be provided in order to allow SDCLT sufficient time to secure the permits and arrange for funding the permit fees (**Attachment B**). As a part of the fourth option agreement amendment, SDCLT and the City approved as to form a draft ground lease and an affordable housing regulatory agreement.

Should the City Council decide to take no action providing for no amendment to the Option Agreement, then the Option Agreement will terminate on April 19, 2018 since the fourth milestone would not have been achieved and, thereafter, the developer would need to renegotiate a new option agreement with the City should they continue to pursue the project. The City Council may pursue other opportunities for the property if this option agreement terminates.

Conclusion:

City staff recommends that the City Council adopt a resolution amending the Option Agreement to provide a fifth time extension and related amendments (**Attachment B**).

Attachment B

RESOLUTION NO. 2018-____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMON GROVE, CALIFORNIA APPROVING AN AMENDMENT TO AN OPTION AGREEMENT WITH THE SAN DIEGO COMMUNITY LAND TRUST FOR THE PARCEL IDENTIFIED AS 8084 LEMON GROVE WAY (APN 475-450-19-00)

WHEREAS, on June 20, 2006 and June 19, 2007, the former Lemon Grove Community Development Agency and a developer entered into loan agreements for the development of nine townhome units at 8084 Lemon Grove Way; and

WHEREAS, said developer defaulted on the loan agreements, resulting in the parcel identified as 8084 Lemon Grove Way becoming property of the City of Lemon Grove; and

WHEREAS, in 2014, the San Diego Community Land Trust provided a formal offer to purchase 8084 Lemon Grove Way from the City of Lemon Grove; and

WHEREAS, the San Diego Community Land Trust's offer included a commitment to develop and construct a minimum of nine affordable housing units to be ground leased for a 99-year period to households earning from 80 percent to 120 percent of the San Diego Area Median Income at the time of sale or resale; and

WHEREAS, the provision of these affordable units helps exceed the City's moderate housing targets established by the Regional Housing Needs Assessment (January 1, 2013 – December 31, 2020); and

WHEREAS, on June 17, 2014, the City Council directed City staff to negotiate purchase agreements with the San Diego Community Land Trust, based on its offer; and

WHEREAS, on September 16, 2014, the City Council approved an Option Agreement and a Real Estate Purchase and Sale Agreement between the City of Lemon Grove and the San Diego Community Land Trust; and

WHEREAS, on May 17, 2016, the City Council approved an amendment to the Option Agreement with the San Diego Community Land Trust extending the expiration date of milestone 7.4 to October 19, 2016 and the option term to March 22, 2017 (both six month extensions) and including an Optionee requirement to execute an Affordable Housing Agreement and Regulatory Agreement and a Notice of Affordability Restrictions on Transfer of Property; and

WHEREAS, the City has negotiated a second amendment to the Option Agreement with the San Diego Community Land Trust further extending the expiration date of milestone 7.4 to April 19, 2017 and the option term to September 22, 2017 (both six month extensions); and

WHEREAS, the City has negotiated a third amendment to the Option Agreement with the San Diego Community Land Trust further extending the expiration date of milestone 7.4 to October 19, 2017 and the option term to March 22, 2018 (both six month extensions) and requiring milestone 7.2 – secure construction financing – to be completed by July 19, 2017; and

WHEREAS, the City has negotiated a fourth amendment to the Option Agreement with the San Diego Community Land Trust further extending the expiration date of milestone 7.4 to April 19, 2018 and the option term to September 22, 2018 (both six month extensions) and requiring milestone 7.2 – secure construction financing – to be completed a minimum of 10 days prior to the execution of the option; and

WHEREAS, the City has negotiated a fifth amendment to the Option Agreement with the San Diego Community Land Trust further extending the expiration date of milestone 7.4 to October 19, 2018 and the option term to March 22, 2019 (both six month extensions); and

WHEREAS, the City Council has reviewed said amendment; and

WHEREAS, the City Council finds it in the best interest of the City of Lemon Grove to approve said amendment; and

Attachment B

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lemon Grove, California hereby:

1. Approves a Fifth Amendment to the Option Agreement (Exhibit 1) between the City of Lemon Grove and the San Diego Community Land Trust; and
2. Authorizes the City Manager to execute said Amendment and related documents reasonably necessary for fulfilling the terms of the Option Agreement, subject to minor modifications.

/ / / / /

Attachment B

EXHIBIT 1 (PAGES 7 THROUGH 8)

FIFTH AMENDMENT TO OPTION AGREEMENT

This Fifth Amendment to Option Agreement (**"Fifth Amendment"**) is entered into as of April 18, 2018, by and between and between THE CITY OF LEMON GROVE a public body ("**Optionor**") and THE SAN DIEGO COMMUNITY LAND TRUST a California 501(c)(3) non-profit organization ("**Optionee**"),

RECITALS:

A. Optionor and Optionee entered into that certain Option Agreement dated September 22, 2014 relating to the Property commonly known as 8084 Lemon Grove Way, Lemon Grove, CA (APN475-450-19-00), as amended by the First Amendment dated March 18, 2016, as amended by the Second Amendment dated October 5, 2016, as amended by the Third Amendment dated April 17, 2017, and as amended by the Fourth Amendment dated October 18, 2017 (together the **"Option Agreement"**).

B. Optionor and Optionee desire to further amend the Option Agreement set forth herein. All initially capitalized terms not otherwise defined herein shall have the same meanings as set forth in the Option Agreement.

AGREEMENT:

NOW THEREFORE, and in consideration of the mutual agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Optionor and Optionee hereby agree as follows:

1. Extension of Option Term. Paragraph 4 of the Option Agreement is deleted in its entirety and replaced as follows:

> "4. Option Term. The Option may be exercised upon the Effective Date and no later than March 22, 2019 (the "**Option Term**"), unless terminated earlier under the terms of Section 6. If the Option is not exercised in accordance with the provisions and conditions hereof during the Option Term, then the Option shall expire and the parties shall have no further obligations under this Agreement with the exception of any surviving indemnification obligations as provided in this Agreement."

2. Extension of deadline for Permits and Optionor's Approval. Subparagraph 7.4 of the Option Agreement is deleted in its entirety and replaced as follows:

> "7.4 No later than October 19, 2018, Optionee shall have (i) completed all requirements necessary for Building and Site Improvement Permits (including building, street improvement, and grading plans shall be issued and the final map shall be recorded), with the exception of payment of fees for the foregoing permits and plans ("Permit Fees"). All outstanding Permit Fees shall be delivered to Escrow prior to the transfer of the Property to Optionor and shall be a Developer (Optionee) deliverable under section 2.6 of the revised Real Estate Purchase and Sale Agreement ("PSA"), as attached to the Fourth Amendment as Fourth Amendment Exhibit A."

3. Counterparts. This Fifth Amendment may be signed in multiple counterparts with the same force and effect as if all original signatures appeared on one copy; and in the event, this Fifth Amendment is signed in counterparts, each counterpart shall be deemed an original and all of the counterparts shall be deemed to be one Fifth Amendment.

4. Effect of Fifth Amendment. Except as amended hereby, the Option Agreement remains in full force and effect.

Attachment B

IN WITNESS WHEREOF, Optionor and Optionee have executed this Fifth Amendment as of the date set forth above.

OPTIONOR:

THE CITY OF LEMON GROVE,

By: _____

Name: _____
Its: _____

Approved as to legal form:

By_____
James P. Lough, City Attorney

OPTIONEE:

THE SAN DIEGO COMMUNITY LAND TRUST,

By: _____

Name: _____
Its: _____

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. __1G____
Mtg. Date __April 17, 2018 __
Dept. __Fire Department__

Item Title: Acceptance of 17 SHSGP Funds

Staff Contact: Colin Stowell, Fire Chief

Recommendation:

Staff recommends that the City Council adopt a resolution accepting FY 2017 State Homeland Security Grant (SHSG) funds and authorize the City Manager to execute appropriate agreements and/or grant documents required to receive and use said funds in accordance with SHSP requirements.

Item Summary:

The City of Lemon Grove has been approved to receive $19,284 from the State Homeland Security Program (SHSP) from FY 17 funds. SHSG funds play an important role in the implementation of Presidential Policy Directive-8 (PPD-8) by supporting the development and sustainment of core capabilities to fulfill the National Preparedness Goal (NPG). Additionally, SHSG supports the implementation of State Homeland Security Strategies to address the identified planning, organizational, equipment, training and exercise needs to prevent, protect against, mitigate, respond to and recover from acts of terrorism and other catastrophic events. The funds will be used to purchase Self-Contained Breathing Apparatus equipment and a portable radio. Modifications to the equipment purchase may be made by the department.

Fiscal Impact:

There is no direct fiscal impact to the City of Lemon Grove

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption, Section
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

A. Staff Report
B. Resolution

Attachment A

LEMON GROVE CITY COUNCIL
STAFF REPORT

Item No. 1G

Mtg. Date April 17, 2018

Item Title: Acceptance of 17 SHSGP Funds

Staff Contact: Daryn Drum, Division Chief

Discussion:

The City of Lemon Grove has been approved to receive $19,284 from the State Homeland Security Program (SHSP) from FY 17 funds. This amount was determined by the Unified Disaster Council's previously established and agreed upon allocation formula. FY 17 SHSP funding will be utilized by the fire department to purchase Self-Contained Breathing Apparatus (SCBA) and equipment. The equipment will include SCBA bottles that will replace soon to be un-usable due to Occupational Health and Safety Administration (OSHA) regulations, masks, and other needed items. Additionally, SHSP funds will purchase a portable radio. SHSG funds play an important role in the implementation of Presidential Policy Directive -8 (PPD-8) by supporting the development and sustainment of core capabilities to fulfill the National Preparedness Goal (NPG). SHSG also supports the implementation of State Homeland Security Strategies to address the identified planning, organizational, equipment, training and exercise needs to prevent, protect against, mitigate, respond to and recover from acts of terrorism and other catastrophic events.

Conclusion:

Staff recommends that the City Council adopt the resolution (**Attachment B**) authorizing the City Manager to accept FY 2017 State Homeland Security Grant funds in the amount of $19,284 and to execute any required grant documents and/or agreements necessary for the receipt and use of said funds. Additionally, staff recommends that the City Council appropriate the SHSP funds in the amount of $19,284 to the fire department to purchase replacement SCBAs and related equipment and a portable radio. Modifications to the equipment purchase may be made by the department.

Attachment B

RESOLUTION NO. 2018-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMON GROVE, CALIFORNIA ACCEPTING FISCAL YEAR 2017 STATE HOMELAND SECURITY GRANT FUNDS

WHEREAS, the City of Lemon Grove is dedicated to providing high quality fire and EMS services to its citizens and maintaining the highest level of preparedness in order to respond to and mitigate acts of terrorism and other catastrophic events; and

WHEREAS, the State Homeland Security Grant Program distribution formula allocates $19,284 to the City of Lemon Grove be used to respond to and/or recover from acts of terrorism and other catastrophic events; and

WHEREAS, the allocated funds will be used to purchase vital equipment used by fire department personnel to safely respond to acts of terrorism and other catastrophic events;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lemon Grove, California:

1. Accepts the Fiscal Year 2017 State Homeland Security Program funds.
2. Authorizes the City Manager to execute required grant documents and/or agreements necessary for the receipt and use of said funds.

/ / / / /
/ / / / /

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 1.H.
Mtg. Date April 17, 2018
Dept. Development Services Department

Item Title: **Adopt Resolution Upholding Development Services Director's Determination to Deny Zoning Clearance No. ZCM-170-0002; a Request to Apply for a Conditional Use Permit to Establish a Medical Marijuana Dispensary at 3515-21 Harris Street in the General Commercial/Heavy Commercial Zone**

Staff Contact: David De Vries, Development Services Director

Recommendation:

1. Adopt a Resolution (**Attachment B**) upholding the Development Services Director's determination to deny ZCM-170-0002, a request to apply for a conditional use permit to establish a medical marijuana dispensary at 3515-21 Harris Street in the General Commercial/Heavy Commercial Zone.

Item Summary:

On April 3, 2018, the City Council adopted a Resolution upholding the Development Services Director determination to deny Zoning Clearance Application No. ZCM-170-0002, a request to establish a medical marijuana dispensary (MMD) on a 0.2 acre commercial property located at 3515-3521 Harris Street with an amendment that provisions associated with "An application shall not apply for the same or similar use affecting all or part of the property within twelve months of the effective date of the decision of denial" be waived in accordance with Section 17.28.020(I) of the Lemon Grove Municipal Code. The application was denied because the proposed MMD would be at a property located within 1,000 feet of one State-licensed family daycare facility. The attached resolution for consideration provides staff's interpretation of the City Council's action for recommended adoption (**Attachment A**). The new text is underlined. The public hearing and comment period is closed for this item.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Categorically Exempt
☐ Negative Declaration
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Tribal Government Consultation Request
☐ Notice published in local newspaper
☐ Notice to property owners within 500 ft.

Attachments:

A. Resolution of Denial

RESOLUTION NO.2017-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMON GROVE UPHOLDING THE DEVELOPMENT SERVICES DIRECTOR'S DETERMINATION TO DENY A REQUEST TO APPLY FOR A CONDITIONAL USE PERMIT TO ESTABLISH A MEDICAL MARIJUANA DISPENSARY AT 3515-21 HARRIS STREET (ZCM-170-0002), LEMON GROVE, CALIFORNIA

WHEREAS, on November 8, 2016, voters in the City of Lemon Grove passed Measure V, an initiative removing the City's prohibition of medical marijuana dispensaries and establishing performance standards and a permit process by which medical marijuana dispensaries may be established; and

WHEREAS, Measure V includes the adoption of Lemon Grove Municipal Code Chapter 17.32 which prohibits the establishment of medical marijuana dispensaries within 1,000 feet of certain protected uses, including schools and licensed daycare facilities; and

WHEREAS, Measure V states "measurement is made between the closest property lines of the premises in which the regulated uses and protected uses are located." Measure V further states "the measurement of distance between uses will take into account natural topographical barriers and constructed barriers such as freeways or flood control channels that would impede direct physical access between the uses. In such cases, the separation distance shall be measured as the most direct route around the barrier in a manner that establishes direct access." Measure V only references freeways and flood control channels as examples of constructed barriers. A freeway is defined as "an express highway, especially one with controlled access." Flood control is defined as "the act or technique of controlling river flow with dams, dikes, artificial channels, etc., so as to minimize the occurrence of floods." Examples of constructed barriers only include major linear obstructions traversing for miles where pedestrian access is prohibited or severely limited; and

WHEREAS, City staff requested and obtained a confidential list of licensed family daycare homes from the California Department of Social Services; and

WHEREAS, in order to obtain the confidential list of family daycare homes, City of Lemon Grove staff agreed to keep the information confidential; and

WHEREAS, Government Code Section 6254.5(e) specifically exempts government agencies from the requirement to disclose confidential information that was shared between agencies under an agreement to maintain the confidentiality of said information; and

WHEREAS, on March 13, 2017, the City received a confidential list from the California Department of Social Services noting at least two such facilities are within 1,000 feet of 3515-21 Harris Street (Subject Property); and

WHEREAS, on March 21, 2017, Zoning Clearance application ZC1-700-0003, a request to apply for a CUP to operate a medical marijuana dispensary (MMD) at the Subject Property, was denied because the property was located within 1,000 feet of a State-licensed family daycare facility and applicant did not appeal the application; and

WHEREAS, the State provided evidence to the City that two licensed family daycares within 1,000 feet of the Subject Property had both surrendered their license. These were the same facilities which previously restricted a MMD at the Subject Property. This new evidence allowed the prospective MMD to reapply for a zoning clearance for a MMD on December 6, 2017 and subsequently the City provided the appellant a Notice of Incomplete on January 4, 2018 because several materials required for a CUP submittal were not submitted; and

Attachment A

WHEREAS, on February 13, 2018, DSS informed the City that a new small family daycare was licensed as of February 12, 2018 at one of the previously licensed daycares that had surrendered their license and was within 1,000 feet of the Subject Property; and

WHEREAS, on February 15, 2018, because the Subject Property was now within 1,000 feet of a protected use (a small family daycare), the Development Services Director denied the Zoning Clearance application in process (ZCM-170-0002) determining the Subject Property was ineligible for a MMD; and

WHEREAS, on February 20, 2018, the appellant, Jilette Yousif of KIM Investments, LLC, filed AA1-800-0001, an administrative appeal of the Director's decision; and

WHEREAS, on March 8, 2018, out of an abundance of caution and in order to provide a full and open opportunity for the appellant to understand the reason staff denied the zoning clearance permit, and to allow the appellant to respond accordingly, staff disclosed the address of the protected use affecting the Subject Property along with the date of the appeal hearing as evidenced by the letter attached to the Agenda Item Summary as Attachment "K". This licensed family daycare facility is located 649 feet southwest of the Subject Property using straight line measurement; and

WHEREAS, on March 8, 2018, staff contacted the family daycare operator via an email and written letter and informed them that their location would be disclosed to the appellant; and

WHEREAS, the appellant has failed to show that their facility is greater than 1,000 feet from the California-licensed daycare facility; and

WHEREAS, Vehicle Code Section 21954 (Pedestrians Outside Crosswalks) includes requirements that "every pedestrian upon a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway so near as to constitute an immediate hazard" meaning pedestrians are authorized to cross at Harris Street and Citrus Street and vehicles must yield to pedestrians at these uncontrolled intersections (unmarked crosswalks and no traffic signals); and

WHEREAS, on April 3, 2018, the City Council held a duly noticed public hearing to consider Administrative Appeal AA1-800-0001, an appeal of the Development Services Director's determination to deny ZCM-170-0002; and

WHEREAS, the appeal of this determination is not a project and is not subject to the environmental review requirements of the California Environmental Quality Act (CEQA); and

NOW, THEREFORE, INCORPORATING THE ABOVE STATEMENTS HEREIN, BE IT RESOLVED that the City Council of the City of Lemon Grove hereby:

1. Denies Jilette Yousif of KIM Investments, LLC Administrative Appeal No. AA1-800-0001 based on the above-findings; and

2. Upholds the Development Services Director's February 15, 2018 determination to deny Zoning Clearance No. ZCM-170-0002, a request to apply for a conditional use permit to operate a medical marijuana dispensary, at 3515-21 Harris Street, Lemon Grove, CA.

3. Waives provisions associated with "An application shall not apply for the same or similar use affecting all or part of the property within twelve months of the effective date of the decision of denial" in accordance with Section 17.28.020(I) of the Lemon Grove Municipal Code.

LEMON GROVE City Council
AGENDA ITEM SUMMARY

Item No. _2_____
Mtg. Date __April 17, 2018__
Dept. __Finance__

Item Title: Annual Financial Report for Fiscal Year 2016-17

Staff Contact: Al Burrell, Interim Finance Director

Recommendation:

Receive and file the annual Financial Report for Fiscal Year 2016-17 **(Attachment B)**

Item Summary:

The City contracted with Van Lant & Fankhanel, LLP to complete the Fiscal Year 2016-17 independent audit. The Audit has been completed and staff presents the annual Financial Report for the Fiscal Year ending on June 30, 2017 (Attachment B). Mr. Greg Fankhanel, Partner will be available to the City Council to answer questions.

Fiscal Impact:

None.

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption, Section
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Notice to property owners within 300 ft.
☐ Notice published in local newspaper
☐ Neighborhood meeting

Attachments:

A. Staff Report
B. Comprehensive Annual Financial Report
C. Appropriations Limit Worksheets Report
D. Auditor's Communication with Those Charged with Governance
E. Report on Internal Control Over Financial Reporting

Attachment A

LEMON GROVE City Council
STAFF REPORT

Item No. 2

Mtg. Date April 17, 2018

Item Title: Annual Financial Report for Fiscal Year 2016-17

Staff Contact: Al Burrell, Interim Finance Director

Discussion:

The Comprehensive Annual Financial Report (CAFR) communicates the City's financial condition and activity for the fiscal year ended June 30, 2017. The independent auditor's unqualified (clean) opinion provides the assurance that the CAFR presents fairly the City's financial position for the fiscal year ended June 30, 2017.

Also included with the financial statements are two letters required by government auditing standards, and one letter describing procedures used in verifying the calculation of the Appropriation Limit. The first letter is the Auditor's Communication with Those Charged with Governance. The purpose of this letter is to allow the auditor to communicate directly with the City Council the scope of the audit procedures performed, qualitative aspects of the city's accounting practices, any significant difficulties encountered during the audit, and any other significant matters that are not communicated in the audited financial statements. The second letter is the Report on Internal Control Over Financial Reporting. This letter describes the auditor's reliance of the city's internal control to determine audit procedures.

Financial Highlights

At the end of the fiscal year the City's Net Position was stable, with the Net Position declining .2 percent from the previous year. At the end of the fiscal year, the General Fund unassigned fund balance was $5.3 million, approximately 40.7% of total general fund expenditures. Government Finance Officers Association (GFOA) recommends 2 months minimum ratio of reserves to expenditures. The city's year end June 30, 2017 ratio was 4.9 months.

Attachments:

- Comprehensive Annual Financial Report
- Appropriations Limit Worksheets Report
- Auditor's Communication with Those Charged with Governance
- Report on Internal Control Over Financial Reporting

Attachment E

Report on Internal Control Over Financial Reporting

Van Lant & Fankhanel, LLP
Certified Public Accountants

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

City Council
City of Lemon Grove
Lemon Grove, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, business-type activities, each major fund and the aggregate remaining fund information of the City of Lemon Grove (City), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated April 10, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying schedule of findings and responses, we identified certain deficiencies in internal control that we consider to be material weaknesses.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in item 2017-1 in the accompanying schedule of findings and responses to be a material weakness.

Van Lant & Fankhanel, LLP
25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying schedule of findings and responses as items 2017-2 to 2017-5 to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

City of Lemon Grove's Responses to Findings

The City's responses to the findings identified in our audit are described in the accompanying schedule of findings and responses. The City's responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Van Lant & Fankhanel, LLP

April 10, 2018

CITY OF LEMON GROVE
SCHEDULE OF FINDINGS AND RESPONSES
Year Ended June 30, 2017

2017-1 Accounting Records/Financial Reporting

Condition:

In preparation for the 2016-17 annual audit, the City's Finance staff performed analysis and reconciliations of various accounts in the City's general ledger. Although the City provided us with analysis and supporting documentation when we began our year-end audit fieldwork, it became apparent that certain accounts had not yet been thoroughly analyzed and reconciled to supporting documentation. When we brought this to the City's attention, eventually the required analysis, reconciliations, and adjusting journal entries were made by City Finance personnel. However, this was completed several months after year-end, with adjustments still being made to the June 30, 2017 accounting records as late as February 2018. Affected accounts included certain revenues, receivables, capital assets, claims payable, and various payroll-related liabilities. Normally, the year-end accounting records should be fully analyzed, adjusted and reconciled within a few months after year-end.

As disclosed in the City's June 30, 2017 financial statements, some of the required adjustments involved revisions to the June 30, 2016 balances (prior period adjustments). It appeared that certain accounts had not been analyzed/reconciled for quite some time.

Criteria:

The City's management is responsible for establishing and maintaining effective internal controls over financial reporting to help ensure that appropriate goals and objectives are met. This responsibility includes the selection and application of accounting principles, ensuring that financial information is reliable and properly recorded, and evaluating and monitoring ongoing activities. The City's management is responsible for preparing accurate year-end accounting records and financial statements, in a timely manner.

Reconciliation and review of all balance sheet accounts and various revenue and expenditure accounts on a recurring basis, and especially at year-end, is a vital part of maintaining the integrity of the accounting and financial reporting system. Periodic reconciliations of all balance sheet and other selected accounts provide accurate data from which to base decisions, prevent costly errors and provide timely financial reports. Year-end analysis and documentation should be maintained on file, in an organized fashion, to provide evidence in support of financial statement amounts and disclosures. The City is subject to various financial reporting deadlines, including State and Federal requirements. This includes the California Government Code and the Single Audit requirements of the Federal Government.

If accounting records are not adequately maintained throughout each fiscal year, the year-end closing process tends to be more difficult and time-consuming, and may contribute to delays in issuing year-end reports.

2017-1 Accounting Records/Financial Reporting - Continued

Cause of Condition:

Based on the City's prior year audit reports and our firm's experience while performing the 2016-17 annual audit, the City's Finance Department has had significant problems in maintaining consistency in management personnel. During the 2016-17 audit process, the City had two temporary, part-time Finance Directors, while the Finance Manager resigned in the middle of our audit fieldwork without any notice.

In addition, it appears the City has not established and documented detailed accounting procedures for the year-end closing process.

Potential Effect of Condition:

Because of the issues mentioned above, the 2016-17 audit process was delayed. The City was not able to issue audited financial statements in a timely manner. Overall, the audit process was inefficient from our perspective, and, most likely, the City's perspective. In addition, the financial information and reports being utilized by City management were not necessarily accurate throughout the 2016-17 fiscal year, due to the significant adjustments made during the audit process.

Recommendation:

In order to maintain the integrity of the accounting and financial reporting system, and to ensure timely reporting, we recommend the City develop detailed, written procedures for the year-end closing process. This should include a checklist of all analysis/reconciliations to be performed along with the applicable due dates. All balance sheet accounts and other selected accounts should be analyzed as appropriate. We suggest a schedule of accounting functions to be performed be prepared with the provision for signing off upon completion. This will provide documentation for the year-end closing process even if there is turnover in Finance personnel.

The City should re-evaluate personnel practices and philosophies, especially in the Finance Department. While the City is subject to budget constraints, as are most government agencies, maintaining consistency in Finance management positions will help ensure accurate and timely financial reporting, and also compliance with applicable laws, regulations, and contract provisions. In the long run, having consistent, highly-qualified personnel in the Finance Department will help ensure that the City Council and other City Management are receiving accurate and timely financial information.

2017-1 Accounting Records/Financial Reporting - Continued

Management's Response:

We agree that the City's FY 2017 end-of-year closing was too long after year-end. As noted in the Auditor's "Cause of Condition" section, the City encountered some unusual personnel issues in the Finance Department. The City's management is currently implementing a plan to upgrade and stabilize the Finance Department. The City will establish a year-end checklist and reconcile all balance sheet accounts yearly at a minimum.

2017-2 Segregation of Incompatible Duties

Condition:

Our audit procedures included a review and evaluation of the City's business license function, including the billing and collection of business license fees. Based on our procedures, we noted that the cash receipts clerk at City Hall is responsible for administering the business license program. This includes the billing and collection functions, and maintaining the business license database.

Criteria:

In a strong internal control environment, the billing and collection functions should be segregated. The individual responsible for administering the business license function should not also be handling incoming payments.

Cause of Condition:

Incompatible duties performed by the same individual creates opportunity for business license revenues to be received but not recorded in the City's general ledger.

Potential Effect of Condition:

Lack of internal controls in the City's business license function could result in payments being collected that are not ultimately recorded in the City's general ledger and deposited into the City's bank accounts.

Recommendation:

We recommend the City evaluate the business license function to determine if the collection function could be segregated from the administration/billing function. At a minimum, City management should establish procedures for independent personnel to reconcile the business license activity to the revenue in the general ledger and bank deposits.

2017-2 Segregation of Incompatible Duties - Continued

Management's Response:

The City agrees that in a strong internal control environment, billing and collection functions should be segregated. The City's Finance Department has limited staff and complete segregation of duties is not always achievable. The City will institute several mitigating controls (for example: tasking the Accounting Analyst the responsibility of matching the business license reports with bank deposits on a monthly basis) to reduce the risks of fraud and errors that can occur with weak internal controls.

2017-3 Old Outstanding Checks/Bank Account Reconciliations

Condition:

Our review of various bank account reconciliations during the 2016-17 audit indicated that the City was carrying over several old outstanding checks each month. Some of these checks were issued in 2010, which does not appear to be in compliance with the City's established procedures. Also, the City has custody of certain funds and accounts held by a fiscal agent. During our audit, we noted these accounts had not been fully reconciled to the City's general ledger.

Criteria:

The City's "Financial Policy and Procedures Manual" includes a section regarding bank account reconciliations. This includes a section providing guidance on stale dated checks identified during the bank reconciliation process. It describes in detail the procedures to be performed for old outstanding checks.

Cause of Condition:

It is not clear why the City has not followed it's established procedures regarding stale dated checks, other than the lack of consistency in the Finance Department's management function. For the accounts held by a fiscal agent, the personnel turnover in the Finance Department appears to be the cause of certain accounts not being reconciled in a timely manner.

Potential Effect of Condition:

The City has recorded decreases to cash along with the related expenditures, for checks issued many years ago, which have not cleared the bank account. This can potentially result in cash (and fund balance) being understated, and the opportunity for the old outstanding checks to be misappropriated. For the fiscal agent accounts, various activity had not been recorded or reconciled for the 2016-17 fiscal year.

2017-3 Old Outstanding Checks/Bank Account Reconciliations - Continued

Recommendation:

We recommend that the City's management review the bank reconciliation function and procedures in relation to the established Financial Policy and Procedures Manual to determine if procedures are being followed. The review process for bank account reconciliations should also be revisited and revised accordingly, to ensure applicable policies are being followed.

Management's Response:

The City's bank reconciliation policy is in review and will be updated. Finance management will monitor the bank reconciliation process to ensure it is being followed.

2017-4 Travel Expenses/City Credit Cards

Condition:

While conducting audit procedures relating to disbursements/expenditures, we were unable to obtain a list of all City-issued credit cards. We also noted that the required travel authorization forms were not included in the supporting documentation for certain travel expenses paid by the City's credit cards. In our testing of credit card statements, we noted that one of them did not have the required signature for payment approval.

Criteria:

The City has established policies regarding the use of City credit cards and travel expenses. This includes the utilization of a "Travel Authorization/Expense Report."

Cause of Condition:

It appears that the City has not maintained a list of City-issued credit cards. It is not clear why the City has not adhered to the established procedures regarding "Travel Authorization/Expense Reports." Lack of approval signatures may be the result of the issues described in item 2017-1 above.

Potential Effect of Condition:

The City's travel expenses and other payments by credit card may not be adequately reviewed and approved. The condition described above could result in a lack of transparency for some of the City's disbursements/expenditures.

2017-4 Travel Expenses/City Credit Cards - Continued

Recommendation:

We recommend the City take steps to ensure that all travel costs and credit card payments are properly reviewed, approved and documented, in accordance with established policy.

Management's Response:

The City's travel form will be updated to conform to the City's travel policy. The City is creating a list of City-issued credit cards and will maintain the list going forward. All City travel costs and credit card payments will be reviewed, approved and documented, in accordance with established policy.

2017-5 Allocation of Salaries/Overhead to Restricted Funds

Condition:

Based on our testing of costs charged to the City's Gas Tax Fund (Fund), it appears the City is charging both direct salaries and indirect overhead costs to the Fund. Various percentages are used to allocate the salaries of certain positions, including Finance and Human Resources personnel, to the Fund. However, the City's staff was not able to provide us with documentation in support of these allocation methods. For example, we were not able to find a cost allocation study, or plan, which would provide evidence that these allocations are reasonable.

Criteria:

The State Controller's Office has established "Guidelines Relating to Gas Tax Expenditures" to be used by Cities and Counties. Section 440 regarding Overhead indicates, "Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead to all departments." For the sake of transparency, the City should ensure that all costs charged to restricted funds are adequately documented. This documentation should include evidence that overhead costs are equitable and reasonable, in relation to all costs incurred by the City.

Cause of Condition:

The City was not able to provide us with a cost allocation study or plan in support of the costs mentioned above. It is not clear why the City has not maintained documentation to ensure compliance with the State's requirements and to document the reasonableness of all overhead costs.

2017-5 Allocation of Salaries/Overhead to Restricted Funds - Continued

Potential Effect of Condition:

Unallowable costs could be charged to restricted funds, including the Gas Tax Fund.

Recommendation:

Based on discussions with City staff, it appears the City has taken steps to contract with a consultant to perform a salary distribution study. We recommend the City continue in these efforts to ensure all overhead costs are properly documented.

Management's Response:

The City is continuing its efforts to ensure all overhead costs are properly documented.

Attachment D

Auditor's Communication to Governing Body

Van Lant & Fankhanel, LLP
Certified Public Accountants

April 10, 2018

City Council
City of Lemon Grove
Lemon Grove, CA

We have audited the financial statements of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove for the year ended June 30, 2017. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, *Government Auditing Standards,* and the Uniform Guidance, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated June 7, 2017. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the City are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the fiscal year. We noted no transactions entered into by the City during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

> Management's estimate of the fair value of investments is based on information provided by financial institutions. We evaluated the key factors and assumptions used to develop the fair value of investments in determining that it is reasonable in relation to the financial statements as a whole.

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25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

Management's estimate of capital assets depreciation is based on historical estimates of each capitalized item's useful life. We evaluated key factors and assumptions used to develop the estimated useful lives in determining that they are reasonable in relation to the financial statements as a whole.

Management's estimate of the net pension liability is based on actuarial information provided by the California Public Employee Retirement System's (CalPERS) actuarial office. We evaluated the key factors and assumptions to develop the net pension liability in determining that it is reasonable in relation to the financial statements as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosure affecting the financial statements were:

The disclosure of the fair value of investments in Note 2 to the financial statements represents amounts susceptible to market fluctuation.

The disclosures in Note 4 regarding an allowance for doubtful accounts established for the amounts owed to the City by the Successor Agency, is based on management's current estimates.

The disclosure of accumulated depreciation in Note 5 to the financial statements is based on estimated useful lives which could differ from actual useful lives of each capitalized item.

The disclosure of the net pension liability in Note 7 to the financial statements is based on the City's proportionate share of the total pension liability of the pool and includes assumptions for discount rates, which could differ from actual discount rates. Note 7 discloses the differences in the net pension liability assuming different discount rates.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated April 10, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the City's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the City's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

With respect to the supplementary information accompanying the financial statements, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

New Accounting Pronouncements

As described in Note 1 to the financial statements, in June 2016, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits and Other Than Pensions*. GASB Statement No. 75 will be required to be implemented for the fiscal year ending June 30,

2018 and will have an impact on how the City reports the outstanding liabilities related to postemployment benefits other than pensions. Note 1 also describes additional GASB Statements to be implemented in the future.

Restrictions on Use

This information is intended solely for the use of the City Council and management of the City and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Attachment C

Appropriations Limit Worksheets Report

Van Lant & Fankhanel, LLP
Certified Public Accountants

INDEPENDENT ACCOUNTANT'S REPORT ON AGREED-UPON PROCEDURES APPLIED TO APPROPRIATIONS LIMIT WORKSHEETS

City Council
City of Lemon Grove
Lemon Grove, California

We have performed procedures enumerated below to be the accompanying Appropriations Limit worksheet of the City of Lemon Grove, for the year ended June 30, 2017. These procedures, which were agreed to by the City of Lemon Grove and the League of California Cities (as presented in the publication entitled *Agreed-upon Procedures Applied to the Appropriations Limitation Prescribed by Article XIIIB of the California Constitution)*, were performed solely to assist the City in meeting the requirements of Section 1.5 of Article XIIIB of the California Constitution. The City's management is responsible for the Appropriations Limit worksheet. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and our findings were as follows:

1. We obtained the completed worksheets and compared the limit and annual adjustment factors included in those worksheets to the limit and annual adjustment factors that were adopted by resolution of the City Council. We also compared the population and inflation options included in the aforementioned documents to those that were selected by a recorded vote of the City Council.

   Finding: Although the City used the correct factors provided by the State's Department of Finance, it appears an error was made in the calculation of the growth factor. This resulted in an understatement of the 2016-17 Appropriations Limit of approximately $268,000.

2. For the accompanying Appropriations Limit worksheet, we added last year's limit to total adjustments and agreed the resulting amount to this year's limit.

   Finding: No exceptions were noted as a result of our procedures, except as noted above.

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Loma Linda, CA 92354

909.856.6879

3. We agreed the current year information presented in the accompanying Appropriations Limit worksheet to the other documents referenced in #1 above.

   Finding: No exceptions were noted as a result of our procedures, except as noted above.

4. We agreed the prior year appropriations limit presented in the accompanying Appropriations Limit worksheet to the prior year appropriations limit adopted by the City Council during the prior year.

   Finding: No exceptions were noted as a result of our procedures.

We were not engaged to, and did not, perform an examination, the objective of which would be the expression of an opinion on the accompanying Appropriations Limit worksheet. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. No procedures have been performed with respect to the determination of the appropriations limit for the base year, as defined by the League publication entitled *Article XIIIB of the California Constitution.*

This report is intended solely for the use of the City Council and management of the City of Lemon Grove and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

April 10, 2018

CITY OF LEMON GROVE
APPROPRIATIONS LIMIT COMPUTATION
2016 – 2017

		2016 - 2017
Change in Per Capita Personal Income		5.37%
Population Change		
City Population Growth		0.62%
Change in Per Capita Personal Income Converted to a Ratio		1.0537
Population Change Converted to a Ratio		1.0062
Calculation of Growth Factor		1.0540
2015 - 2016 Appropriations Limit	$ 43,261,317	
2016 - 2017 Appropriations Limit ($43,261,317 X 1.0540)	45,597,428	

Attachment B

Comprehensive Annual Financial Report

City of Lemon Grove

Annual Financial Report

For the Fiscal Year Ended June 30, 2017

Van Lant & Fankhanel, LLP
Certified Public Accountants

CITY OF LEMON GROVE

FINANCIAL STATEMENTS

Year Ended June 30, 2017

City of Lemon Grove
Financial Statements
June 30, 2017

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Van Lant & Fankhanel, LLP
Certified Public Accountants

Independent Auditor's Report

The Honorable City Council
City of Lemon Grove, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove (City), as of and for the year ended June 30, 2017, and the related notes to the financial statements which collectively comprise the City's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove, as of June 30, 2017, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and other required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the City's basic financial statements. The schedules listed in the supplementary information section of the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules listed in the supplementary information section are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules listed in the supplementary information section are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued a report dated April 10, 2018 on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

April 10, 2018

As management of the City of Lemon Grove (City) we offer readers of the City's Annual Financial Report this narrative overview and analysis of the financial activities of the City for the fiscal year ended June 30, 2017. We encourage readers to consider the information presented here in conjunction with the Basic Financial Statements and attached notes.

FINANCIAL HIGHLIGHTS

- The assets plus deferred outflows of the City exceeded its liabilities and deferred inflows of the City by $78.2 million.
- The net position value decreased from the previous year by $0.1 million, or 0.2 percent.
- The City's governmental funds reported a combined ending fund balance of $13.6 million, a decrease from the previous year of $2.6 million, or 16.1 percent. The main drivers in the decrease were an increase in public safety and public works expenditures of 1.0 million and 1.1 million respectively.
- At the end of the current fiscal year, the General Fund unrestricted fund balance (the total of the committed, assigned, and unassigned components of fund balance) was $5.3 million, or approximately 40.7% of total General Fund expenditures.
- The City's capital assets (net of depreciation) increased by $3.1 million and total outstanding long-term debt increased by $1.0 million during the current fiscal year.

OVERVIEW OF THE ANNUAL FINANCIAL REPORT

A major component of the Financial Section of the City's Annual Financial Report is the Basic Financial Statements, and is comprised of three components: 1) government-wide financial statements, 2) governmental fund financial statements, and 3) notes to the basic financial statements. This report also contains other supplementary information in addition to the basic financial statements.

Government-wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business.

The government-wide financial statements distinguish functions that are principally supported by taxes and intergovernmental revenues *(governmental activities)* from other functions that are intended to recover all or a significant portion of their costs through user fees and charges *(business-type activities)*. The governmental activities of the City include general government, public safety, public works, community services, and development services. The business-type activity of the City is the Lemon Grove Sanitation District.

Also included in the government-wide financial statements are the Lemon Grove Sanitation District (Sanitation District), a blended component unit, and the Lemon Grove Lighting District (Lighting District), a blended component unit. Blended component units, although legally separate entities, are, in substance, part of the primary government's operations and are included as part of the primary government. While the Sanitation District and Lighting District are legally separate agencies, their governing board consists entirely of City Council members.

Statement of Net Position: This statement presents information on all of the City's assets and liabilities, with the difference between the two reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The following schedule displays a summary breakdown of the City's statement of net position:

Comparative Statements of Position									
June 30, 2017 and 2016									
(Amounts in Millions)									
	Governmental Activities			Business-Type Activities			Citywide Total		
	2017	2016	Change	2017	2016	Change	2017	2016	Change
Assets:									
Cash and investments	8.6	6.1	2.5	16.8	16.5	0.3	25.4	22.6	2.8
Other assets	11.8	15.3	(3.5)	0.1	0.1	(0.0)	11.9	15.4	(3.5)
Capital assets, net	43.8	41.6	2.2	6.6	5.7	0.9	50.4	47.3	3.1
Total Assets	64.2	63.0	1.2	23.5	22.3	1.2	87.6	85.3	2.3
Deferred Outflows of Resources:									
Deferred Outflows	3.6	2.7	0.9	1.0	1.0	-	4.6	3.7	0.9
Total Deferred Outflows	3.6	2.7	0.9	1.0	1.0	-	4.6	3.7	0.9
Liabilities:									
Long-term liabilities	7.1	5.7	1.4	1.9	1.9	-	9.0	7.6	1.4
Other Liabilities	3.2	2.1	1.1	0.1	0.1	-	3.3	2.2	1.1
Total Liabilities	10.3	7.8	2.5	2.0	2.0	-	12.3	9.8	2.5
Deferred Inflows of Resources:									
Deferred inflows	1.4	0.7	0.7	0.5	0.1	0.4	1.9	0.8	1.1
Total Deferred Inflows	1.4	0.7	0.7	0.5	0.1	0.4	1.9	0.8	1.1
Net Position:									
Net investment in capital assets	43.5	41.5	2.0	6.6	5.7	0.9	50.0	47.2	2.8
Restricted	10.6	10.4	0.2	-	-	-	10.6	10.4	0.2
Unrestricted	2.1	5.3	(3.2)	15.4	15.4	-	17.5	20.7	(3.2)
Total Net Position	56.2	57.2	(1.0)	21.9	21.1	0.9	78.2	78.3	(0.1)

The City's total net position decreased by 0.2 percent from last year. Net position from governmental activities decreased by 1.8 percent while net position from business activities increased by 4.3 percent. The City's assets exceeded its liabilities by approximately $78.0 million.

Approximately 64 percent of the City's net position reflect its investment in capital assets (i.e., land, buildings, infrastructure, and equipment), less any related debt used to acquire those assets that is still outstanding. The City uses these capital assets to provide services to residents; consequently, these assets are not available for future spending. Although the City's investment is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

Approximately 13.6 percent of the City's net assets reflect resources that are subject to external restrictions as to how they may be used. These restrictions are typically imposed by parties outside the government, such as creditors, grantors, and laws or regulations of other governments.

Statement of Activities: This statement presents information showing how the City's net position changed during the most recent fiscal year. All changes in position are reported as soon as the underlying events giving rise to the change occurs, *regardless of the timing of related cash flows*. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in the future fiscal periods (e.g., uncollected taxes, and earned but unused vacation leave).

The following schedule shows condensed financial information from the statement of activities:

Comparative Statements of Activity
June 30, 2017 and 2016
(Amounts in Millions)

	Governmental Activities			Business-Type Activities			Citywide Total		
	2017	2016	Change	2017	2016	Change	2017	2016	Change
Revenues:									
Program revenues:									
Charges for Services	1.9	1.9	-	6.1	6.3	(0.2)	8.0	8.2	(0.2)
Operating grants and contributions	0.7	1.4	(0.7)	-	-	-	0.7	1.4	(0.7)
Capital grants and contributions	5.0	2.0	3.0	-	-	-	5.0	2.0	3.0
Total Program Revenues	7.6	5.3	2.3	6.1	6.3	(0.2)	13.7	11.6	2.1
General revenues:									
Taxes:									
General property taxes	2.5	2.6	(0.1)	-	-	-	2.5	2.6	(0.1)
Sales tax	5.2	5.3	(0.1)	-	-	-	5.2	5.3	(0.1)
Franchise tax	0.9	1.0	(0.1)	-	-	-	0.9	1.0	(0.1)
Investment earnings	0.5	0.3	0.2	0.1	0.2	(0.1)	0.6	0.5	0.1
Other	2.3	2.3	-	-	-	-	2.3	2.3	0.0
Transfers	0.7	0.7	-	(0.7)	(0.7)	-	-	-	-
Total general revenues	12.1	12.2	(0.1)	(0.5)	(0.5)	(0.1)	11.5	11.7	(0.2)
Total Revenues	19.6	17.5	2.2	5.6	5.8	(0.3)	25.2	23.3	1.9
Expenses:									
General government	1.5	0.9	0.6	-	-	-	1.5	0.9	0.6
Public safety	9.9	8.9	1.0	-	-	-	9.9	8.9	1.0
Public works	5.0	3.9	1.1	-	-	-	5.0	3.9	1.1
Community development	0.9	1.3	(0.4)	-	-	-	0.9	1.3	(0.4)
Sanitation	-	-	-	4.7	5.2	(0.5)	4.7	5.2	(0.5)
Interest on long-term debt	-	-	-	-	-	-	-	-	-
Total Expenses	17.3	15.0	2.3	4.7	5.2	(0.5)	22.0	20.2	1.8
Increase (decrease) in net position	2.3	2.5	(0.2)	0.9	0.6	0.3	3.2	3.1	0.1
Net position- beginning (as restated)	53.9	54.7	(0.8)	21.1	20.5	0.6	74.9	75.2	(0.3)
Net Position Ending	56.2	57.2	(1.0)	21.9	21.1	0.8	78.2	78.3	(0.1)

The governmental activities decreased the City's net position by $1.0 million. Governmental program revenues offset 44 percent of program expenditures, a 9% increase when compared with prior year. General revenues and transfers of $12.1 million did not meet total expenditures. There was a 1.8 percent decrease to governmental activities net position.

The business-type activities increased the City's net position by $0.8 million. Business-type program revenues exceeded expenditures, resulting in a 3.8 percent increase to business-type net position. This is the tenth year that the Lemon Grove Sanitation District has had staff to maintain the sewers, thus allowing for more control over expenditures and an enhanced ability to grow assets for future needs.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. City funds are divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Unlike the government-wide financial statements, the fund financial statements focus on *near-term inflows and outflows of spendable resources*, as well as on *balances of spendable resources* available at the end of the fiscal year, and offer summary information for each major fund. Such information may be useful in evaluating a government's near-term financing requirements. In particular, *unassigned fund balance* serves as a useful measure of a government's net resources available for spending at fiscal year-end.

Governmental Funds: *Governmental funds* are used to account for the functions reported as *governmental activities* in the government-wide financial statements.

As of June 30, 2017, the City's governmental funds reported a combined ending fund balance of $13.6 million. The unassigned fund balance, which represents the amount that is available for spending at the City's discretion, is currently at $4.5 million. The remainder of fund balance is restricted to indicate that it is not available for new spending because it has been committed to a variety of restricted purposes including low and moderate housing and debt service.

The City maintains nineteen individual governmental funds. Information is presented separately in the governmental fund balance sheet and in the governmental fund statement of revenues, expenditures and changes in fund balances for the major funds – General, and Housing Fund. Data from the other seventeen governmental funds are combined into a single, aggregated presentation entitled Nonmajor Governmental Funds. Individual fund data for each of these nonmajor governmental funds is provided in the supplementary information section of this report.

The General Fund is the chief operating fund of the City. At June 30, 2017, the total fund balance was $5.3 million, of which $5.3 million is considered unassigned fund balance and therefore available for discretionary use. The remaining fund balance is made up of non-spendable fund balance of $0.02 million and no restricted fund balances.

Proprietary Funds: The City maintains two types of proprietary funds; an enterprise fund to account for the Lemon Grove Sanitation District and an internal service fund to account for the City's self-insurance - function.

There is no restricted net position for these funds, and the changes in net position show a growth over last year for Sanitation of 3.8 percent and a decrease of the Internal Service fund of 34.65 percent.

Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. Below are three notes of particular interest.

Note 2 – Cash and Investments: The City's total cash and investments at the end of the fiscal year totaled $29.7 million. Approximately $21.8 million was invested with the Local Agency Investment Fund. Approximately $1.8 million was held and invested by bond trustees, and the balance was deposited in the City's checking accounts.

Note 5 – Capital Assets: Capital assets for the City's governmental activities were valued at $43.8 million, net of accumulated depreciation. Capital assets for the City's business-type activities were valued at $6.6 million. This investment in capital assets includes land, buildings, construction in progress, equipment, vehicles, and infrastructure.

Note 6 – Long-Term Liabilities: The City had a total long-term debt outstanding of $9.0 million. The majority of this amount, $6.7 million is comprised of net pension liability. The City's total long-term debt increased by $1.4 million from the prior year.

Required Supplementary Information

The required supplementary information is comprised of budgetary comparisons for the General Fund and the Housing Fund.

The City adopts an annual budget for its General Fund and all other funds. A comparison between budget and actual is incorporated in the financial report to demonstrate compliance with the budget. The original budget was adopted in June 2016.

The General Fund Budgetary Comparison Schedule shows that, for this fiscal year, the General Fund experienced a gain of expected revenues and transfers of $852,421, while the expenditures were under what was expected by $160,693. The actual revenues and expenditures resulted in a net deficit of $175,366. The difference between expected deficit and actual is $1.0 million.

REQUESTS FOR INFORMATION

The Annual Financial Report is designed to provide a general view of the City's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Finance Director at the City of Lemon Grove, 3232 Main Street, Lemon Grove, CA 91945, (619) 825-3800, or aburrell@lemongrove.ca.gov.

BASIC FINANCIAL STATEMENTS

City of Lemon Grove
Statement of Net Position
June 30, 2017

	Governmental Activities	Business-type Activities	Totals
ASSETS			
Cash and Investments	$ 8,623,027	$ 16,812,448	$ 25,435,475
Receivables:			
Accounts	3,495,245	63,470	3,558,715
Interest	1,592,018	-	1,592,018
Notes and Loans Receivable	6,693,062	-	6,693,062
Prepaid Items	8,578	258	8,836
Internal Balances	-	-	-
Cash and Investments with Fiscal Agent	28,202	-	28,202
Capital Assets, Not Being Depreciated	10,851,403	1,342,651	12,194,054
Capital Assets, Net of Accumulated Depreciation	32,929,273	5,247,178	38,176,451
Total Assets	64,220,808	23,466,005	87,686,813
DEFERRED OUTFLOWS OF RESOURCES			
Pension Related Amounts	3,624,882	953,228	4,578,110
LIABILITIES			
Accounts Payable	2,746,902	55,951	2,802,853
Accrued Liabilities	202,802	41,266	244,068
Deposits Payable	211,064	-	211,064
Noncurrent Liabilities:			
Due Within One Year	373,198	24,861	398,059
Due in More Than One Year	6,740,422	1,865,746	8,606,168
Total Liabilities	10,274,388	1,987,824	12,262,212
DEFERRED INFLOWS OF RESOURCES			
Pension Related Amounts	1,354,369	489,786	1,844,155
NET POSITION			
Net Investment in Capital Assets	43,454,713	6,589,829	50,044,542
Restricted for:			
Transportation	794,774	-	794,774
Community Development	91,037	-	91,037
Public Safety	623,475	-	623,475
Housing	8,877,451	-	8,877,451
Public-access Television	243,385	-	243,385
Unrestricted	2,132,098	15,351,794	17,483,892
Total Net Position	$ 56,216,933	$ 21,941,623	$ 78,158,556

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Activities
Year Ended June 30, 2017

Functions/Programs	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions
Governmental Activities:				
General Government	$ 1,543,159	419,353	$ 6,485	$ -
Public Safety	9,884,392	744,377	166,846	-
Public Works	4,990,867	109,556	489,013	4,991,543
Community Development	882,340	583,702	50,243	-
Total Governmental Activities	17,300,758	1,856,988	712,587	4,991,543
Business-type Activities:				
Sanitation	4,690,722	6,121,851	-	-
Total Business-type Activities	4,690,722	6,121,851	-	-
Total Primary Government	$ 21,991,480	$ 7,978,839	$ 712,587	$ 4,991,543
General Revenues:				
Taxes:				
Property Taxes				
Sales Taxes				
Transient Occupancy Taxes				
Franchise Taxes				
Motor Vehicle in Lieu Taxes (Unrestricted)				
Investment Earnings				
Miscellaneous				
Transfers				
Total General Revenues and Transfers				
Change in Net Position				
Net Position, Beginning (Restated)				
Net Position, Ending				

The accompanying notes are an integral part of this statement.

Net (Expense) Revenue and Changes in Net Position		
Governmental Activites	Business-type Activities	Totals
$ (1,117,321)	$ -	$ (1,117,321)
(8,973,169)	-	(8,973,169)
599,245	-	599,245
(248,395)	-	(248,395)
(9,739,640)	-	(9,739,640)
-	1,431,129	1,431,129
-	1,431,129	1,431,129
(9,739,640)	1,431,129	(8,308,511)
2,454,561	-	2,454,561
5,176,561	-	5,176,561
52,043	-	52,043
938,714	-	938,714
2,272,050	-	2,272,050
28,321	103,386	131,707
497,209	-	497,209
652,400	(652,400)	-
12,071,859	(549,014)	11,522,845
2,332,219	882,115	3,214,334
53,884,714	21,059,508	74,944,222
$ 56,216,933	$ 21,941,623	$ 78,158,556

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Balance Sheet
Governmental Funds
June 30, 2017

	General Fund	Special Revenue: Housing Fund	Special Revenue: Transnet	Total Non-major Governmental Funds	Totals
ASSETS					
Cash and Investments	$ 4,919,383	$ 607,718	$ -	$ 1,940,097	$ 7,467,198
Accounts Receivable	1,114,152	49,975	2,007,090	322,163	3,493,380
Interest Receivable	-	1,592,018	-	-	1,592,018
Notes and Loans	-	6,693,062	-	-	6,693,062
Due from Other Funds	936,434	-	-	-	936,434
Prepaid Items	8,578	-	-	-	8,578
Due from Successor Agency	-	-	-	-	-
Cash with Fiscal Agents	3,499	-	-	-	3,499
Total Assets	$ 6,982,046	$ 8,942,773	$ 2,007,090	$ 2,262,260	$ 20,194,169
LIABILITIES					
Accounts Payable	$ 1,323,287	$ 65,322	$ 1,291,107	$ 63,207	$ 2,742,923
Accrued Liabilities	170,583	-	3,490	28,729	202,802
Due to Other Funds	-	-	770,653	165,781	936,434
Deposits Payable	149,561	-	-	61,503	211,064
Total Liabilities	1,643,431	65,322	2,065,250	319,220	4,093,223
DEFERRED INFLOWS					
Unavailable Revenue	41,497	1,641,993	670,136	127,770	2,481,396
Total Deferred Inflows	41,497	1,641,993	670,136	127,770	2,481,396
FUND BALANCES					
Nonspendable	8,578	-	-	-	8,578
Restricted	-	7,235,458	-	1,876,454	9,111,912
Committed	-	-	-	-	-
Assigned	-	-	-	-	-
Unassigned	5,288,540	-	(728,296)	(61,184)	4,499,060
Total Fund Balances (Deficits)	5,297,118	7,235,458	(728,296)	1,815,270	13,619,550
Total Liabilities, Deferred Inflows and Fund Balances	$ 6,982,046	$ 8,942,773	$ 2,007,090	$ 2,262,260	$ 20,194,169

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Reconciliation of the Balance Sheet of Governmental Funds
to the Statement of Net Position
June 30, 2017

Fund Balances of Governmental Funds		$ 13,619,550
Amounts reported for Governmental Activities in the Statement of Net Position are different because:		
Capital assets used in Governmental Activities are not financial resources and, therefore, are not reported in the funds.		
Capital Assets	$ 82,155,452	
Accumulated Depreciation	(38,374,776)	43,780,676
In governmental funds, other long-term assets are not available to pay for current period expenditures and, therefore, are reported as unavailable revenue in the funds.		2,481,396
Internal service funds are used by management to charge the cost of risk management to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net position.		684,255
Long-term liabilities are not due and payable in the current period and therefore are not reported in the funds.		
Capital Lease Payable		(325,963)
Compensated Absences		(815,748)
Net OPEB Obligation		(417,695)
Net Pension Liability		(5,060,051)
Amounts for deferred inflows and deferred outflows related to the City's Net Pension Liability are not reported in the funds.		
Deferred Outflows - Pension Related Amounts		3,624,882
Deferred Inflows - Pension Related Amounts		(1,354,369)
Net Position of Governmental Activities		$ 56,216,933

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Revenues, Expenditures, and Changes in Fund Balances
Governmental Funds
Year Ended June 30, 2017

	General Fund	Special Revenue: Housing Fund	Special Revenue: Transnet	Total Non-major Governmental Funds	Totals
REVENUES					
Taxes and Special Assessments	$ 10,882,008	$ -	$ -	$ 320,084	$ 11,202,092
Licenses and Permits	464,877	-	-	-	464,877
Fines, Forfeitures and Penalties	229,624	-	-	-	229,624
Intergovernmental Revenues	32,368	1,486,326	2,007,654	2,001,117	5,527,465
Charges for Services	440,756	-	-	187,576	628,332
Use of Money and Property	280,599	-	-	10,185	290,784
Other Revenues	497,209	-	-	6,944	504,153
Total Revenues	12,827,441	1,486,326	2,007,654	2,525,906	18,847,327
EXPENDITURES					
Current:					
General Government	1,025,265	-	76,528	70,675	1,172,468
Public Safety	9,710,139	-	-	24,178	9,734,317
Public Works	1,419,603	-	-	1,495,339	2,914,942
Community Development	566,562	-	-	183,614	750,176
Capital Outlay	194,550	1,337,304	2,357,785	263,305	4,152,944
Debt Service:					
Principal	76,545	-	-	-	76,545
Interest	10,143	-	-	-	10,143
Total Expenditures	13,002,807	1,337,304	2,434,313	2,037,111	18,811,535
Excess (Deficiency) of Revenues Over Expenditures	(175,366)	149,022	(426,659)	488,795	35,792
OTHER FINANCING SOURCES (USES)					
Transfers In	685,400	-	-	326,463	1,011,863
Transfers Out	(225,684)	-	-	(133,779)	(359,463)
Total Other Financing Sources (Uses)	459,716	-		192,684	652,400
Net Change in Fund Balances	284,350	149,022	(426,659)	681,479	688,192
Fund Balances, Beginning (Restated)	5,012,768	7,086,436	(301,637)	1,133,791	12,931,358
Fund Balances, Ending	$ 5,297,118	$ 7,235,458	$ (728,296)	$ 1,815,270	$ 13,619,550

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances
of Governmental Funds to the Statement of Activities
Year Ended June 30, 2017

Net Change in Fund Balances - Total Governmental Funds		$ 688,192
Amounts reported for Governmental Activities in the Statement of Activities are different because:		
Governmental funds report capital outlay as expenditures. However, in the statement of activities, the cost of these assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlay exceeded depreciation expense in the current year.		
Capital outlay	$ 3,529,999	
Depreciation expense	(1,779,351)	1,750,648
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.		133,250
The amounts below included in the statement of activities do not provide or require the use of current financial resources and, therefore, are not reported as revenues or expenditures in governmental funds (net change):		
Capital Lease		76,545
Compensated Absences		(68,449)
OPEB Liability		(40,814)
Net Pension Liability		95,284
Claims Payable		-
Loss on Disposal of Capital Assets		(15,640)
Amounts for deferred inflows and deferred outflows related to the City's Net Pension Liability are not reported in the funds. This is the net change in deferred inflows and outflows related to the net pension liability.		
Deferred Outflows - Pension Related Amounts		657,038
Deferred Inflows - Pension Related Amounts		(581,047)
Internal service funds are used by management to charge the cost of certain activities, such as risk management, to individual funds. The net revenue (expense) of the internal service funds is recorded with governmental activities.		(362,788)
Change in Net Position of Governmental Activities		$ 2,332,219

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Net Position
Proprietary Funds
June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
ASSETS		
Current Assets:		
Cash and Investments	$ 16,812,448	$ 1,155,829
Accounts Receivable	63,470	1,865
Prepaids	258	-
Total Current Assets	16,876,176	1,157,694
Noncurrent Assets:		
Cash and Investments with Fiscal Agent	-	24,703
Capital Assets, Not being depreciated	1,342,651	-
Capital Assets, Net of Accumulated Depreciation	5,247,178	-
Total Noncurrent Assets	6,589,829	24,703
Total Assets	23,466,005	1,182,397
DEFERRED OUTFLOWS OF RESOURCES		
Pension Actuarial Amounts	953,228	-
Total Deferred Outflows of Resources	953,228	-
LIABILITIES		
Current Liabilities:		
Accounts Payable	55,951	3,979
Accrued Liabilities	41,266	-
Compensated Absences	24,861	-
Claims Payable	-	-
Total Current Liabilities	122,078	3,979
Noncurrent Liabilities:		
Compensated Absences, Noncurrent	58,009	-
Claims Payable, Noncurrent	195,232	494,163
Net Pension Liability	1,612,505	-
Total Noncurrent Liabilities	1,865,746	494,163
Total Liabilities	1,987,824	498,142
DEFERRED INFLOWS OF RESOURCES		
Pension Actuarial Amounts	489,786	-
Total Deferred Inflows of Resources	489,786	-
NET POSITION		
Net Investment in Capital Assets	6,589,829	-
Unrestricted	15,351,794	684,255
Total Net Position	$ 21,941,623	$ 684,255

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Funds
Year Ended June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
OPERATING REVENUES		
Charges for Sales and Services	$ 6,101,903	$ -
Other Revenues	19,948	84,142
Total Operating Revenue	6,121,851	84,142
OPERATING EXPENSES		
Personnel Costs	1,249,384	-
Contractual Services	288,274	14,578
Materials and Supplies	75,478	-
Repairs and Maintenance	69,669	-
Dump Fees	2,648,020	-
Utilities	5,360	-
Insurance and Claims	153,999	439,102
Depreciation	200,538	-
Total Operating Expenses	4,690,722	453,680
Operating Income (Loss)	1,431,129	(369,538)
NONOPERATING REVENUES (EXPENSES)		
Interest Income	103,386	6,750
Total Nonoperating Revenues (Expenses)	103,386	6,750
Income (Loss) Before Transfers and Capital Contributions	1,534,515	(362,788)
Transfers Out	(652,400)	-
Total Transfers	(652,400)	-
Change in Net Position	882,115	(362,788)
Net Position - Beginning of Year (Restated)	21,059,508	1,047,043
Net Position - End of Year	$ 21,941,623	$ 684,255

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Cash Flows
Proprietary Funds
Year Ended June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from Customers and Users	$ 6,132,062	$ 88,349
Payments to Suppliers for Goods and Services	(3,104,380)	(49,479)
Payments to Employees for Services	(1,119,823)	-
Net Cash Provided (Used) by Operating Activities	1,907,859	38,870
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Cash Transferred to Other Funds	(652,400)	-
Net Cash Provided (Used) by Noncapital Financing Activities	(652,400)	-
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and Construction of Capital Assets	(1,082,337)	-
Capital Grants	-	-
Net Cash Provided (Used) by Capital and Related Financing Activities	(1,082,337)	-
CASH FLOWS FROM INVESTING ACTIVITIES		
Investment Income Received	103,386	6,750
Net Cash Provided (Used) by Investing Activities	103,386	6,750
Net Increase (Decrease) in Cash and Cash Equivalents	276,508	45,620
Cash and Cash Equivalents - Beginning of the Year	16,535,940	1,134,912
Cash and Cash Equivalents - End of the Year	$ 16,812,448	$ 1,180,532
RECONCILIATION OF CASH AND CASH EQUIVALENTS		
Cash and Investments	$ 16,812,448	$ 1,155,829
Restricted Cash and Investments	-	24,703
Total Cash and Cash Equivalents	$ 16,812,448	$ 1,180,532
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	$ 1,431,129	$ (369,538)
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation	200,538	-
(Increase) Decrease in Accounts Receivable	10,211	4,207
(Increase) Decrease in Prepaids	4,334	-
(Increase) Decrease in Deferred Outflows - Pension Actuarial	18,302	-
Increase (Decrease) in Accounts Payable and Accrued Liabilities	31,700	3,979
Increase (Decrease) in Net Pension Liability	(259,197)	-
Increase (Decrease) in Deferred Inflows - Pension Actuarial	350,005	-
Increase (Decrease) in Claims Payable	100,386	400,222
Increase (Decrease) in Compensated Absences Payable	20,451	-
Net Cash Provided by Operating Activities	$ 1,907,859	$ 38,870

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Net Position
Fiduciary Funds
June 30, 2017

	Successor Agency Private-purpose Trust Fund
ASSETS	
Cash and Investments	$ 2,366,405
Cash and Investments with Fiscal Agent	1,826,314
Accounts Receivable	2,770
Interest Receivable	862,955
Notes Receivable	3,200,230
Property Held for Resale	6,535,362
Total Assets	14,794,036
DEFERRED OUTFLOWS OF RESOURCES	
Deferred Loss on Refunding	293,386
Total Deferred Outflows of Resources	293,386
LIABILITIES	
Interest Payable	438,372
Accounts Payable	-
Due to the City of Lemon Grove	3,719,687
Bonds Payable, Short-term Portion	710,000
Bonds Payable, Long-term Portion	23,095,000
Total Liabilities	27,963,059
NET POSITION	
Net Position Held in Trust for Successor Agency	$ (12,875,637)

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Changes in Net Position
Fiduciary Funds
Year Ended June 30, 2017

	Successor Agency Private-purpose Trust Fund
ADDITIONS	
Property Taxes	$ 2,229,896
Interest Revenue	114,708
Total Additions	2,344,604
DEDUCTIONS	
Administration	2,420
Project Costs	95,595
Interest Expense	1,120,363
Total Deductions	1,218,378
Change in Net Position	1,126,226
Net Position - Beginning of Year (Restated)	(14,001,863)
Net Position - End of Year	$ (12,875,637)

The accompanying notes are an integral part of this statement.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The basic financial statements of the City of Lemon Grove, California (City) have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to governmental agencies. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the City's accounting policies are described below.

A. Financial Reporting Entity

The City of Lemon Grove was incorporated in 1977, under the laws of the State of California.

The accompanying basic financial statements present the financial activities of the City and its component units, entities for which the City is considered to be financially accountable. Blended component units, although legally separate entities are, in substance, part of the City's operations and data from these units are combined with data of the City. The City had no discretely presented component units. The blended component units have a June 30 year end. The following entities are reported as blended component units:

The Lemon Grove Sanitation District (Sanitation District) was established on June 10, 1982 as part of an annexation/detachment change of organization. The Sanitation District provides sewer services within the City of Lemon Grove. The City Council acts as the Sanitation District's governing board and exerts significant influence over its operations.

The Lemon Grove Landscape and Lighting District (Landscape and Lighting District) was established on May 1, 1978 to provide for establishing various street lighting improvements and maintenance for property within the City of Lemon Grove. The City Council acts as the Landscape and Lighting District's governing board and exerts significant influence over its operations.

Separate financial statements for the Sanitation District and Landscape and Lighting District are not available.

B. Basis of Accounting and Measurement Focus

The accounts of the City are organized on the basis of funds, each of which is considered a separate accounting entity with its own self-balancing set of accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures or expenses. These funds are established for the purpose of carrying out specific activities or certain objectives in accordance with specific regulations, restrictions or limitations. Governmental resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled.

Government-Wide Financial Statements

The City's Government-Wide Financial Statements include a Statement of Net Position and a Statement of Activities. These statements present summaries of Governmental and Business-Type Activities for the City accompanied by a total column. These financial statements are presented on an "economic resources" measurement focus and the accrual basis of accounting. Accordingly, all of the City's assets and liabilities, including capital assets, as well as infrastructure assets, and long-term liabilities, are included in the accompanying Statement of Net Position. The Statement of Activities presents changes in net position. Under the accrual basis of accounting, revenues are recognized in the period in which they are earned while expenses are recognized in the period in which the liabilities are incurred.

Certain types of transactions reported as program revenues for the City are reported in three categories:

- Charges for services
- Operating grants and contributions
- Capital grants and contributions

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

Certain eliminations have been made regarding interfund activities, payables, and receivables. All internal balances in the Statement of Net Position have been eliminated except those representing balances between the governmental activities and the business-type activities, which are presented as internal balances and eliminated in the total primary government column. In the Statement of Activities, internal fund transactions have been eliminated; however, those transactions between governmental and business-type activities have not been eliminated. The following interfund activities have been eliminated:

- Due to/from other funds
- Transfers in/out

The City applies all applicable GASB pronouncements including all NCGA Statements and Interpretations currently in effect.

Governmental Fund Financial Statements

Governmental fund financial statements include a Balance Sheet and a Statement of Revenues, Expenditures and Changes in Fund Balances for all major governmental funds and non-major funds aggregated. An accompanying schedule is presented to reconcile and explain the differences in net position as presented in these statements to the net position presented in the government-wide financial statements. The City has presented all major funds that meet specific qualifications.

All governmental funds are accounted for on a spending or "current financial resources" measurement focus and the modified accrual basis of accounting. Accordingly, only current assets and current liabilities are included on the balance sheet. The Statement of Revenues, Expenditures and Changes in Fund Balances presents increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Under the modified accrual basis of accounting, revenues are recognized in the accounting period in which they become both measurable and available to finance expenditures of the current period. Revenues are considered to be *available* when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due.

The primary revenue sources that have been treated as susceptible to accrual by the City are property taxes, taxpayer-assessed tax revenues (sales taxes, transient occupancy taxes, franchise taxes, etc.), grant revenues and earnings on investments. Expenditures are recorded in the accounting period in which the related fund liability is incurred.

The City reports the following funds as major governmental funds of the City.

General Fund accounts for resources traditionally associated with governmental activities that are not required legally or by sound financial management to be accounted for in another fund.

Housing Fund accounts for the housing assets transferred from the former Redevelopment Agency, and the revenues and expenditures for the project area related to low- and moderate-income housing.

Transnet Fund accounts for Transnet allocation and street related projects eligible for Transnet funding. This fund is specifically used to finance significant right-of-way improvements (streets and sidewalks), storm drain, and traffic related projects.

Proprietary Fund Financial Statements

Proprietary fund financial statements include a Statement of Net Position, a Statement of Revenues, Expenses and Change in Net Position, and a Statement of Cash Flows for all proprietary funds. A column representing internal service funds is also presented in these statements. However, internal service balances and activities have been combined with the governmental activities in the Government-wide Financial Statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Proprietary funds are accounted for using the "economic resources" measurement focus and the accrual basis of accounting. Accordingly, all assets and liabilities (whether current or noncurrent) are included on the Statement of Net Position. The Statement of Revenues, Expenses and Changes in Fund Net Position presents increases (revenues) and decreases (expenses) in net position. Under the accrual basis of accounting, revenues are recognized in the period in which they are earned while expenses are recognized in the period in which a liability is incurred.

Operating revenues in the proprietary funds are those revenues that are generated from the primary operations of the fund. All other revenues are reported as non-operating revenues. Operating expenses are those expenses that are essential to the primary operations of the fund. All other expenses are reported as non-operating expenses.

The City reports the Sanitation Enterprise Fund and Self Insurance Internal Service Funds as proprietary funds of the City.

Sanitation Enterprise Fund accounts for the operation and maintenance of the wastewater system within the City's boundaries.

Internal service fund balances and activities have been combined with governmental activities in the Government-wide Financial Statements, and are comprised of the following funds:

Self Insurance Internal Service Fund accounts for all financial transactions related to the City's self insurance program. The service is provided to other City or agencies of the City on a cost reimbursement basis.

Fiduciary Fund Financial Statements

Fiduciary fund financial statements consist of a Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position. The City has two types of fiduciary funds, agency funds (as applicable) and a private-purpose trust fund. Agency funds are used to account for the assets held for distribution by the City as an agent for another entity for which the City has custodial responsibility and accounts for the flow of assets. Private-purpose trust funds account for resources of all other trust arrangements in which principal and income benefit individuals, private organizations, or other governments (i.e. unclaimed property/escheat property). Fiduciary funds are accounted for using the accrual basis of accounting.

The City reports the following fiduciary funds:

Successor Agency to the Lemon Grove Community Development Agency Private Purpose Trust Fund – accounts for the balances and activities relating to the dissolution of the former Community Development Agency (Agency), except those accounted for in the Housing Special Revenue Fund of the City.

C. Cash, Cash Equivalents, and Investments

The City pools cash resources from all funds in order to facilitate the management of cash. The balance in the pooled cash account is available to meet current operating requirements. Cash in excess of current requirements is invested in various interest-bearing accounts and other investments with varying terms.

In accordance with GASB Statement No. 40, *Deposit and Investment Disclosures*, certain disclosure requirements for Deposits and Investment Risks were made in the following areas:

- Interest Rate Risk
- Credit Risk
  - Overall
  - Custodial Credit Risk
  - Concentrations of Credit Risk

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

In addition, other disclosures are specified including use of certain methods to present deposits and investments, highly sensitive investments, credit quality at year-end, and other disclosures. In accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, highly liquid market investments with maturities of one year or less at time of purchase are stated at amortized cost. All other investments are stated at fair value. Market value is used as fair value for those securities for which market quotations are readily available.

The City participates in an investment pool managed by the State of California entitled Local Agency Investment Fund (LAIF) which has invested a portion of the pooled funds in Structured Notes and Asset-Backed Securities. LAIF's investments are subject to credit risk with the full faith and credit of the State of California collateralizing these investments. In addition, these Structured Notes and Asset-Backed Securities are subject to market risk as to the change in interest rates.

Cash equivalents are considered amounts in demand deposits and short-term investments with a maturity date within three months of the date acquired by the City and are presented as "Cash and Investments" in the accompanying Basic Financial Statements.

For purposes of the statement of cash flows, cash equivalents are defined as investments with original maturities of 90 days or less, which are readily convertible to known amounts of cash. The City considers all pooled cash and investments (consisting of cash and investments and restricted cash and investments) held by the City as cash and cash equivalents because the pool is used essentially as a demand deposit account from the standpoint of the funds. The City also considers all non-pooled cash and investments (consisting of cash with fiscal agent and restricted cash and investments held by fiscal agent) as cash and cash equivalents because investments meet the criteria for cash equivalents defined above.

D. Restricted Cash and Investments

Certain restricted cash and investments are held by fiscal agents for the redemption of bonded debt and for acquisition and construction of capital projects.

E. Compensated Absences

Vacation pay is payable to employees at the time a vacation is taken or upon termination of employment. Normally, an employee cannot accrue more than two times their regular annual entitlement.

Sick leave is payable when an employee is unable to work because of illness. Unused sick leave at termination is lost, unless eligible for conversion to retirement credit as provided by the City contract with CalPERS. For safety employees, upon retirement or termination of employment, suppression employees shall be paid for all accrued unfrozen sick leave at the rate of one-half the accumulated time. Pay shall be based upon vested amounts at the employee's pay rate at the time the hours were earned. Upon retirement, employees have the option to apply sick leave time toward retirement credit. Upon retirement, employees shall have the option to apply sick leave toward retirement credit on an hour-for-hour basis. The General Fund is primarily responsible for the repayment of the governmental portion of compensated absences.

F. Property Taxes

Property taxes in the State of California are administered for all local agencies at the county level, and consist of secured, unsecured, and utility tax rolls, as follows:

Property Valuations are established by the Assessor of the County of San Diego for the secured and unsecured property tax rolls; the utility property tax rolls are valued by the State Board of Equalization. Under the provisions of Article XIIIA of the State Constitution (Proposition 13 adopted by the voters on June 6, 1978), properties are assessed at 100% of full value. From this base assessment, subsequent annual increases in valuation are limited to a maximum of 2%. However, increases to full value are allowed for property improvements or upon change in ownership. Personal property is excluded from these limitations, and is subject to annual reappraisal.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Tax Levies are limited to 1% of full value which results in a tax rate of $1.00 per $100 assessed valuation, under the provisions of Proposition 13. Tax rates for voter-approved indebtedness are excluded from this limitation. The City's share of the $1.00 varies depending on the tax rate area and it ranges from $0.0730 to $0.125.

Tax Levy Dates are attached annually on January 1 preceding the fiscal year for which the taxes are levied. The fiscal year begins July 1 and ends June 30 of the following year. Taxes are levied on both real and unsecured personal property as it exists at that time. Liens against real estate, as well as the tax on personal property, are not relieved by subsequent renewal or change in ownership.

Tax Levy Apportionments: Due to the nature of the City-wide maximum levy, it is not possible to identify general purpose tax rates for specific entities. Under State legislation adopted subsequent to the passage of Proposition 13, apportionments to local agencies are made by the county auditor-controller based primarily on the ratio that each agency represented of the total City-wide levy for the three years prior to fiscal year 1979.

Property Tax Administration Fees: The State of California FY 1990-91 Budget Act authorized counties to collect an administration fee for collection and distribution of property taxes. Property taxes are recorded net of administration fees withheld during the fiscal year.

The following are significant dates relating to the City's property taxes:

Lien date	March 1
Levy date	June 30
Due date	November 1 and February 1
Collection dates	December 10 and April 10

G. Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, traffic lights and signals, street lights, and similar items), are reported in the applicable government-wide financial statements. Capital assets are defined by the City as assets with an initial, individual cost of $5,000 ($100,000 for infrastructure) or more and an estimated useful life in excess of one year. Such capital assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets received prior to the implementation of GASB 72 were recorded at fair value on the date of donation. Donated capital assets received subsequent to the implementation of GASB 72 are recorded at acquisition value as of the date received. The cost of normal maintenance and repairs that do not add to the value of the capital asset or materially extend capital asset lives are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets for business-type activities is included as part of the capitalized value of the assets constructed. No interest was capitalized during the fiscal year ended June 30, 2017.

Capital assets of the City are depreciated using the straight-line method over the following estimated useful lives:

Assets	Years
Structures and Improvements	40
Public Domain Infrastructure	50
System Infrastructure	30
Vehicles	3 to 15
Other Equipment and Furnishings	3 to 20
Computer Equipment	3 to 10

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

H. Interest Payable

In the Government-wide and Proprietary Funds Financial Statements, interest payable on long-term debt is recognized as the liability is incurred.

I. Unavailable and unearned revenue

Unearned revenue is reported for transactions for which revenue has not yet been earned. In the Fund Financial Statements, unavailable revenue is recorded when transactions have not met the revenue recognition criteria based on the modified accrual basis of accounting. The City records unavailable and unearned revenues for transactions for which revenues have not been earned, or for which funds are not available to meet current financial obligations. Typical transactions for which unearned and unavailable revenues are recorded are grants received but not yet earned or available.

J. Claims and Judgments

The short-term and long-term workers' compensation and general liability claims payable are reported in Internal Service Funds. The short-term liability which will be liquidated with current financial resources is the amount of settlement reached, but unpaid, related to claims and judgments entered.

K. Use of Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America, as prescribed by the GASB and American Institute of Certified Public Accountants (AICPA), requires management to make assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses/expenditures during the reporting period. Actual results could differ from those estimates.

L. Long-term Obligations

In the Government-wide Financial Statements and Proprietary Fund Financial Statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Initial-issue bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method. Bond issuance costs are expensed when bonds are issued.

In the fund financial statements, governmental fund types recognize bond premiums, discounts, and issuance costs during the period issued. The face amount of debt issued is reported as other financing sources. Premiums received are reported as other financing sources, while discounts are reported as other financing uses.

M. Net Position

In the Government-wide Financial Statements, net position is classified in the following categories:

Net Investment in Capital Assets – This category consists of capital assets, net of accumulated depreciation and reduced by outstanding debt that is attributed to the acquisition, construction, or improvement of the assets.

Restricted – This category is restricted by external creditors, grantors, contributors, or laws or regulations of governments.

Unrestricted – This category represents all other amounts that do not meet the definition of net investment in capital assets or restricted net position as defined above.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

N. Fund Balances

Non-spendable Fund Balances

These include amounts that cannot be spent because they are either (a) not in spendable form or (b) legally or contractually required to be maintained intact; e.g., the principal of an endowment fund. Examples of "not in spendable form" include inventory, prepaid amounts, property held for resale and other items not expected to be converted to cash. However, if the proceeds from the eventual sale or liquidation of the items would be considered restricted, committed or assigned (as defined further on) then these amounts would be classified as restricted, committed or assigned rather than non-spendable. A debt service reserve fund held by a trustee is an example of fund balance in non-spendable form that is classified as restricted instead of non-spendable since the reserve is eventually liquidated to make the final debt service principal payment.

Restricted Fund Balances

Restricted fund balances have externally enforceable limitations on use. The limitations on use can be imposed by creditors, grantors, or contributors as well as by constitutional provisions, City charter, enabling legislation, laws and government regulations.

Committed Fund Balances

Amounts that can only be used for specific purposes pursuant to constraints imposed by formal action (Ordinance) of the City Council are classified as committed fund balances.

Assigned Fund Balances

Fund balance amounts for which the City Council has expressed intent for use but not taken formal action to commit are reported as assigned under GASB 54.

Unassigned Fund Balance

The residual classification for the General Fund is unassigned fund balance. The General Fund is the only fund that may report a positive unassigned fund balance. Negative fund balance reported in Special Revenue Funds is classified as unassigned fund balance.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then followed by unrestricted resources in the following order: committed, assigned, and unassigned, as necessary.

O. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The City reports an unamortized deferred charge on refunding resulting from the difference in carrying value of refunded debt and its reacquisition price, and deferred employer pension contributions as deferred outflows of resources.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

The City reports two items in this category: unavailable revenues and amounts related to changes in the City's net pension liability that are deferred and amortized over a stated number of years. Unavailable revenues arise only under the modified accrual basis of accounting and, accordingly, are reported only in the governmental funds balance sheet. The governmental funds report unavailable revenue from grants, sales tax revenues, and other

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

applicable revenues. These amounts are deferred and will be recognized as inflows of resources in the period that the amounts become available. The City also reports deferred inflows as a result of the City's implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions,* which qualify for reporting in this category.

P. Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the City of Lemon Grove's California Public Employees' Retirement System (CalPERS) plan (Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Q. New Accounting Pronouncements

The Governmental Accounting Standards Board has issued the following Statements, which may affect the City's financial reporting requirements in the future:

GASB 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.* This statement was issued to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions. This GASB Statement is required to be implemented in financial statements issued for the periods beginning after June 15, 2017. The City has not elected to early-implement this statement and has not determined its effect on the financial statements.

GASB 83, Certain Asset Retirement Obligations: This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

GASB 86, Certain Debt Extinguishment Issues: This Statement establishes reporting requirements for when a government places cash and other monetary assets acquired with only existing resources in an irrevocable trust to extinguish debt. In financial statements using the economic resources measurement focus, governments should recognize any difference between the reacquisition price (the amount required to be placed in the trust) and the net carrying amount of the debt defeased in substance using only existing resources as a separately identified gain or loss in the period of the defeasance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

GASB 87, Leases: This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

2. CASH AND INVESTMENTS

A. Summary of Cash and Investments

Cash and investments within the basic financial statements are reported as follows:

2. CASH AND INVESTMENTS – Continued

	Government-wide Statement of Net Position			
	Governmental Activities	Business-Type Activities	Fiduciary Funds	Total
Cash and Investments	$ 8,623,027	$ 16,812,448	$ 2,366,405	$ 27,801,880
Restricted Cash and Investments	28,202	-	1,826,314	1,854,516
Total Cash and Investments	$ 8,651,229	$ 16,812,448	$ 4,192,719	$ 29,656,396

Cash and investments as of June 30, 2017 consist of the following:

Cash on Hand	$ 1,700
Deposits with Financial Institutions	1,481,335
Deposits with Fiscal Agent	86,182
Total Cash on Hand and Deposits	1,569,217
Local Agency Investment Fund	21,783,966
Certificates of Deposit	4,476,899
Total Investments	26,260,865
Investments with Fiscal Agent:	
Money Market	42,935
U.S. Agency Securities	1,191,651
Corporate Issues	591,728
Total Fiscal Agent Investments	1,826,314
Total Cash and Investments	$ 29,656,396

A. Deposits

The carrying amount of the City's deposits was $1,567,517 at June 30, 2017. Bank balances before reconciling items amounted to $1,843,130 at June 30, 2017. The City has not waived the collateral requirements for cash deposits, which are fully insured up to $250,000 by the Federal Deposit Insurance Corporation. Amounts are collateralized with securities held by the pledging financial institution in the City's name.

The California Government Code (Code) requires California banks and savings and loan associations to secure the City's deposits by pledging securities as collateral. The Code states that collateral pledged in this manner shall have the effect of perfecting a security interest in such collateral superior to those of a general creditor. Thus, collateral for deposits is considered to be held in the City's name. The market value of pledged securities must equal at least 110% of the City's deposits. California law also allows institutions to secure City deposits by pledging first trust deed mortgage notes having a value of 150% of the City's total deposits.

The City follows the practice of pooling cash and investments of all funds, except for funds required to be held by fiscal agents under the provisions of bond indentures. Interest income earned on pooled cash and investments is allocated to the various funds based on the period-end cash and investment balances. Interest income from cash and investments with fiscal agents is credited directly to the related fund.

2. CASH AND INVESTMENTS – Continued

B. Investments Authorized by the California Government Code and the City's Investment Policy

The table below identifies the investment types that are authorized for the City of Lemon Grove by the California Government Code (or the City's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the City's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk. This table does not address investments of debt proceeds held by bond trustee that are governed by the provisions of debt agreements of the City, rather than the general provisions of the California Government Code or the City's investment policy.

Authorized Investment Type	Maximum Maturity	Maximum Percentage/Amount of Portfolio	Maximum Investment in One Issuer
Local Agency Investment Fund (State Pool)	N/A	None	None
Certificates of Deposits	5 Years	30%	None

C. Investments Authorized by Debt Agreements

Investments of debt proceeds held by trustees are governed by provisions of the debt agreements, rather than the general provisions of the California Government Code or the City's investment policy.

D. Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the City manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time, as necessary, to provide the cash flows and liquidity needed for operations.

Information about the sensitivity of the fair values of the City's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the City's investments by maturity:

		Remaining Maturity (in Months)		
Investment Type	Total	12 Months Or Less	13 to 24 Months	25 to 60 Months
Local Agency Investment Fund	$ 21,783,966	$ 21,783,966	$ -	$ -
Certificate of Deposits	4,476,899	738,558	987,075	2,751,266
Held by Fiscal Agents:				
US Bank Money Market	42,935	42,935	-	-
Federal Farm Credit Bank	602,294	602,294	-	-
Federal Home Loan Bank	589,357	589,357	-	-
Private Export Funding Corp.	591,728	-	-	591,728
	$ 28,087,179	$ 23,757,110	$ 987,075	$ 3,342,994

E. Investments with Fair Values Highly Sensitive to Interest Rate Fluctuations

The City's investments (including investments held by bond trustees) do not include any investments that are highly sensitive to interest rate fluctuations.

2. CASH AND INVESTMENTS – Continued

F. Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented on the following page is the minimum rating required by (where applicable) the California Government Code, the City's investment policy, or debt agreements, and the actual rating as of fiscal year end for each investment type.

Investment Type	Amount	Minimum Legal Rating	AA+	Aaa	Unrated
Local Agency Investment Fund	$ 21,783,966	N/A	$ -	$ -	$ 21,783,966
Cerficates of Deposits	4,476,899	N/A	-	-	4,476,899
Held by Fiscal Agents:					
US Bank Money Market	42,935	AAA	-	-	42,935
Federal Farm Credit Bank	602,294	N/A	602,294	-	-
Federal Home Loan Bank	589,357	N/A	589,357	-	-
Private Export Funding Corp.	591,728	A-1+	-	591,728	-
Total	$ 28,087,179		$ 1,191,651	$ 591,728	$ 26,303,800

G. Concentration of Credit Risk

The investment policy of the City contains no limitations on the amount that can be invested in any one issuer. The City has no investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represent 5% or more of total City investments by reporting unit (primary government, governmental activities, business type activities, fiduciary funds, major funds, non- major funds in the aggregate, etc.).

H. Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. None of the City's investments were subject to custodial credit risk.

I. External Investment Pools

The City is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The fair value of the City's investment in this pool is reported in the accompanying financial statements at amounts based upon the City's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio).

The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

2. CASH AND INVESTMENTS – Continued

J. Investment Valuation

Investments (except for money market accounts, time deposits, and commercial paper) are measured at fair value on a recurring basis. *Recurring* fair value measurements are those that Governmental Accounting Standards Board (GASB) Statements require or permit in the statement of net position at the end of each reporting period. Fair value measurements are categorized based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Restricted cash and investments included money market accounts and guaranteed investment contracts which are not subject to fair value measurement. The City has the following recurring fair value measurements as of June 30, 2017:

- Federal Agency Securities of $1,191,651 are valued using a matrix pricing model (Level 2 inputs)
- Certificates of Deposit of $4,476,899 are valued using a matrix pricing model (Level 2 inputs)
- Corporate Securities of $591,728 are valued using quoted market prices (Level 1 inputs)

The City's fair value for its investment in the State of California Local Agency Investment Fund (LAIF) is based on the fair market value factors provided by LAIF that are calculated based on the total fair market value of the pool. LAIF includes investments categorized as Level 1 such as United States Treasury securities, Federal Agency securities, and supranational debentures that are valued based on prices quoted in active markets, and investments categorized as Level 2, such as negotiable certificates of deposit and bank notes that are based on market corroborated pricing utilizing inputs such as yield curves and indices derived principally from, or corroborated by, observable market data by correlation to other means.

3. NOTES RECEIVABLE

Notes receivable as of June 30, 2017 totaled $9,893,292 and consisted of the following:

Hitzke Development Corporation

During the fiscal year ended June 30, 2009, the City entered into Owner Participation Agreements with Hitzke Development Corporation (Developer) for the development of several projects within the City's project area. In addition, the City entered into promissory notes with the Developer with amounts not-to-exceed (excluding accrued interest) $2,763,292 for Citronica One, $2,500,000 for Citronica Two, and $1,500,000 for Citronica Three, all at 3.0% interest and secured by a deed of trust for each note creating a valid lien upon the Developer's interest in the development parcels. The funds are being used to construct a 54-unit mixed-use affordable housing project. The notes call for funds to be advanced to the borrower for the purchase of several parcels to be used for the projects. In addition, the funds can be used for certain pre-development costs. During the fiscal year ended June 30, 2013, the City entered into another promissory note with the Developer in an amount not-to-exceed (excluding interest) $1,323,031for Citronica One. The notes are due and payable two (2) years from the date of the execution of the notes or rolled over as additional assistance into the development and disposition agreement. As of June 30, 2017, the City had advanced $4,263,292 and $2,500,000 (Citronica One and Two, respectively) to the borrower. In addition, $939,629 and $635,249 (Citronica One and Two, respectively) of cumulative interest was accrued.

Community Collective

The City issued a Note to Community Collective in an amount not-to-exceed $3,130,000 at 3.0% interest secured by a deed of trust, assignment of rents, a security agreement and fixture filing. Community Collective is using the funds to construct a mixed-use, multi-family residential housing project for extremely low, very low, and low-income persons. The Note calls for funds to be advanced to the borrower for costs related to the project as the costs are incurred by the borrower. The note is due and payable in full in fifty-five (55) years from the date of the note or upon sale or refinancing of the project. In the event there is surplus cash (as defined in the note), Community Collective shall pay the City one-half of the available surplus cash. As of June 30, 2017, the City had advanced $3,130,000 to the borrower. In addition, $880,094 of cumulative interest was incurred.

4. DUE FROM SUCCESSOR AGENCY

The General Fund previously advanced the former Lemon Grove Community Development Agency amounts to fund various redevelopment projects. The advances payable had no stated interest rate. During fiscal year 2012, following the dissolution of California redevelopment agencies, the payable was transferred from the former Agency to the Private-purpose Trust Fund - Successor Agency to the Lemon Grove Community Development Agency. The repayment of this amount is uncertain as of June 30, 2017, and is subject to approval by the State Department of Finance as an enforceable obligation of the Successor Agency under applicable redevelopment agency dissolution law. As of June 30, 2017, the amount due from the Successor Agency was $3,719,687, and is offset by an allowance for doubtful accounts.

5. CAPITAL ASSETS

A. Governmental Activities

Capital asset activity for governmental activities for the fiscal year ended June 30, 2017, was as follows:

Governmental Activities	Beginning of Year	Additions	Deletions	End of Year
Capital Assets, Not Being Depreciated:				
Land and Improvements	$ 7,520,853	$ -	$ -	$ 7,520,853
Construction in Progress	157,105	3,173,445	-	3,330,550
Total Capital Assets, Not Being Depreciated	7,677,958	3,173,445	-	10,851,403
Capital Assets, Being Depriciated:				
Buildings and Improvements	9,584,779	88,220	-	9,672,999
Vehicles and Equipment	2,643,824	44,550	(157,865)	2,530,509
Infrastructure	58,182,653	917,888	-	59,100,541
Total Capital Assets, Being Depreciated	70,411,256	1,050,658	(157,865)	71,304,049
Less Accumulated Depreciation:				
Buildings and Improvements	(6,303,193)	(249,098)	-	(6,552,291)
Vehicles and Equipment	(1,530,691)	(143,157)	142,225	(1,531,623)
Infrastructure	(28,903,766)	(1,387,096)	-	(30,290,862)
Total Accumulated Depreciation	(36,737,650)	(1,779,351)	142,225	(38,374,776)
Capital Assets Being Depreciated, Net	33,673,606	(728,693)	(15,640)	32,929,273
Total Capital Assets - Governmental Activities	$ 41,351,564	$ 2,444,752	$ (15,640)	$ 43,780,676

Depreciation expense by program for capital assets for the year ended June 30, 2017 was as follows:

General Government	$ 69,915
Public Safety	124,292
Public Works	1,452,980
Community Development	132,164
Total Depreciation	$ 1,779,351

5. CAPITAL ASSETS – Continued

B. Business-type Activities

Capital asset activity for business-type activities for the fiscal year ended June 30, 2017, was as follows:

Business-type Activities	Beginning of Year	Additions	Deletions	End of Year
Capital Assets, Not Being Depreciated:				
Land and Improvements	$ 3,724	$ -	$ -	$ 3,724
Construction in Progress	256,590	1,082,337	-	1,338,927
Total Capital Assets, Not Being Depreciated	260,314	1,082,337	-	1,342,651
Capital Assets, Being Depreciated:				
Machinery and Equipment	1,366,481	-	-	1,366,481
Infrastructure	12,174,611	-	-	12,174,611
Total Capital Assets, Being Depreciated	13,541,092	-	-	13,541,092
Less Accumulated Depreciation:				
Machinery and Equipment	(953,525)	(58,794)	-	(1,012,319)
Infrastructure	(7,139,851)	(141,744)	-	(7,281,595)
Total Accumulated Depreciation	(8,093,376)	(200,538)	-	(8,293,914)
Capital Assets Being Depreciated, Net	5,447,716	(200,538)	-	5,247,178
Total Capital Assets - Business-type Activities	$ 5,708,030	$ 881,799	$ -	$ 6,589,829

6. LONG-TERM DEBT

The following is a summary of changes in the City's long-term liabilities for the fiscal year ended June 30, 2017:

	Beginning Balance*	Additions	Reductions	Ending Balannce	Due Within One Year
Governmental Activities:					
Capital Lease Payable	$ 402,508	$ -	$ (76,545)	$ 325,963	$ 78,474
Compensated Absences	747,299	130,777	(62,328)	815,748	244,724
OPEB Liability	376,881	176,975	(136,161)	417,695	-
Net Pension Liability	5,155,335	-	(95,284)	5,060,051	-
Claims Payable	93,941	428,364	(28,142)	494,163	50,000
Total	$ 6,775,964	$ 736,116	$ (398,460)	$ 7,113,620	$ 373,198

* Includes prior period adjustments of $(62,419) for Compensated Absences, $402,508 for Capital Leases and $400,274 for Net Pension Liability.

For governmental activities, leases payable, compensated absences, the OPEB liability and the net pension liability are generally liquidated by the General Fund.

6. LONG-TERM DEBT – Continued

	Beginning Balance*	Additions	Reductions	Ending Balannce	Due Within One Year
Business-type Activities:					
Compensated Absences	$ 62,419	$ 20,451	$ -	$ 82,870	$ 24,861
Net Pension Liability	1,871,702	-	(259,197)	1,612,505	-
Claims Payable	94,846	100,386	-	195,232	-
Total	$ 2,028,967	$ 120,837	$ (259,197)	$ 1,890,607	$ 24,861

* Includes prior period adjustments of $62,419 for Compensated Absences.

Capital Lease Payable

In 2013, the City entered into a capital lease for the purchase of a pumper. The purchase price for the equipment was $550,000, with annual payments to be made on July 5 of each year, with the final payment on July 5, 2020. The payments include interest of approximately 2.5%. The following represents the future debt service requirements for this lease:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 78,474	$ 6,236	$ 84,710
2019	80,452	6,236	86,688
2020	82,479	4,209	86,688
2021	84,558	2,131	86,689
Total	$ 325,963	$ 18,812	$ 344,775

Fiduciary Fund Long-term Debt

A summary of the Successor Agency Fiduciary Fund long-term debt for the 2016-17 fiscal year is as follows:

	Beginning Balance*	Additions	Deletions	Ending Balance	Due Within One Year
Tax Allocation Bonds:					
Series 2007	$ 12,605,000	$ -	$ (205,000)	$ 12,400,000	$ 215,000
Series 2010, Refunding	6,245,000	-	(365,000)	5,880,000	380,000
Series 2014, Refunding	5,640,000	-	(115,000)	5,525,000	115,000
Total	$ 24,490,000	$ -	$ (685,000)	$ 23,805,000	$ 710,000

*includes a prior period adjustment of $58,758 for issuance discounts.

2007 Tax Allocation Bonds: In June 2007, the former Redevelopment Agency issued $13,830,000 of Tax Allocation Bonds with interest rates varying from 4.00% to 5.00% and payable semi-annually on February 1 and August 1 of each year. The bonds mature annually at various amounts through August 1, 2037. The bonds are payable from and secured by incremental tax revenues (Pledged Tax Revenues). The bonds were issued to finance redevelopment activities within or for the benefit of the Agency's project area, and to finance low- and moderate-income housing activities within the geographic boundaries of the City of Lemon Grove.

6. LONG-TERM DEBT – Continued

Future debt service requirements on the 2007 Tax Allocation Bonds are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 215,000	547,278	$ 762,278
2019	225,000	538,412	763,412
2020	230,000	529,084	759,084
2021	230,000	519,540	749,540
2022	240,000	509,668	749,668
2023	255,000	499,149	754,149
2024	260,000	488,010	748,010
2025	290,000	475,910	765,910
2026	300,000	462,930	762,930
2027	315,000	449,400	764,400
2028	330,000	435,210	765,210
2029	340,000	420,300	760,300
2030	360,000	404,550	764,550
2031	365,000	388,237	753,237
2032	385,000	371,363	756,363
2033	865,000	343,237	1,208,237
2034	1,085,000	299,363	1,384,363
2035	1,135,000	249,413	1,384,413
2036	1,585,000	188,212	1,773,212
2037	1,655,000	115,312	1,770,312
2038	1,735,000	39,037	1,774,037
Totals	$ 12,400,000	$ 8,273,615	$ 20,673,615

2010 Tax Allocation Refunding Bonds**:** During fiscal year 2011, the Agency issued $8,000,000 of Tax Allocation Bonds with interest rates varying from 1.75% to 5.25% and payable semi-annually on February 1 and August 1 of each year. The Bonds mature annually at various amounts through August 1, 2028. The bonds are payable from and secured by incremental tax revenues (Pledged Tax Revenues). The Bond proceeds were used to refund the former Agency's 1998 Tax Allocation Bonds. The scheduled annual minimum debt service requirements at June 30, 2017 are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 380,000	$ 280,068	$ 660,068
2019	395,000	265,043	660,043
2020	410,000	248,430	658,430
2021	425,000	230,155	655,155
2022	445,000	209,690	654,690
2023	470,000	186,685	656,685
2024	490,000	161,965	651,965
2025	520,000	135,957	655,957
2026	545,000	108,534	653,534
2027	570,000	79,537	649,537
2028	600,000	48,825	648,825
2029	630,000	16,538	646,538
Totals	$ 5,880,000	$ 1,971,427	$ 7,851,427

6. LONG-TERM DEBT – Continued

2014 Tax Allocation Refunding Bonds: In August 2014, the former Agency issued $5,740,000 of Tax Allocation Bonds with interest rates varying from 2.00% to 5.00% and payable semi-annually on February 1 and August 1 of each year. The bonds mature annually at various amounts through August 1, 2034. The Bond proceeds were used to refund previously outstanding Tax Allocation Bonds. The scheduled annual minimum debt service requirements at June 30, 2017 are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 115,000	$ 211,874	$ 326,874
2019	120,000	208,636	328,636
2020	125,000	204,961	329,961
2021	130,000	201,136	331,136
2022	135,000	196,993	331,993
2023	135,000	192,605	327,605
2024	145,000	186,786	331,786
2025	140,000	179,661	319,661
2026	150,000	172,411	322,411
2027	165,000	165,877	330,877
2028	165,000	160,205	325,205
2029	170,000	154,215	324,215
2030	835,000	135,456	970,456
2031	875,000	102,300	977,300
2032	910,000	66,600	976,600
2033	505,000	38,300	543,300
2034	345,000	21,300	366,300
2035	360,000	7,200	367,200
Totals	$ 5,525,000	$ 2,606,516	$ 8,131,516

7. DEFINED BENEFIT PENSION PLAN

General Information about the Defined Benefit Pension Plan

Plan Descriptions – All qualified permanent and probationary employees are eligible to participate in the Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Plan) administered by the California Public Employees' Retirement System (CalPERS.) The Plan consists of individual rate plans (benefit tiers) within a safety risk pool and a miscellaneous risk pool. Plan assets may be used to pay benefits for any employer rate plan of the safety and miscellaneous pools. Accordingly, rate plans within the safety or miscellaneous pools are not separate plans under GASB Statement No. 68. Individual employers may sponsor more than one rate plan in the miscellaneous or safety risk pools. The City sponsors five rate plans (three miscellaneous and two safety). Benefit provisions under the Plan are established by State statute and City resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

Benefits Provided – The Plan is a cost-sharing multiple-employer defined benefit pension plan administered by the California Public Employees' Retirement System (CalPERS). A full description of the pension plan benefit provisions, assumptions for funding purposes but not accounting purposes, and membership information is listed in the June 30, 2015 Annual Actuarial Valuation Report. Details of the benefits provided can be obtained in Appendix B of the June 30, 2015 actuarial valuation report. This report is a publicly available valuation report that can be obtained at the CalPERS' website under Forms and Publications.

7. DEFINED BENEFIT PENSION PLAN – Continued

The rate plan provisions and benefits in effect at June 30, 2017, are summarized as follows:

	Miscellaneous	Miscellaneous Tier II	Miscellaneous PEPRA
Hire date	Prior to November 12, 2005	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	2.5% @ 55 single highest year	2% @ 60 36 month average	2% @ 62 36 month average
Benefit vesting schedule	5 years service	5 years service	5 years service
Benefit payments	monthly for life	monthly for life	monthly for life
Retirement age	50	50	52
Monthly benefits, as a % of eligible compensation	2% to 2.5%	1.092% to 2.418%	1% to 2.5%
Required employee contribution rates	8%	7%	6.5%
Required employer contribution rates	10.069% + $374,100	7.159%	6.555% + $11

	Safety	Safety PEPRA
Hire date	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	3% @ 55 single highest year	2.7% @ 57 36 month average
Benefit vesting schedule	5 years service	5 years service
Benefit payments	monthly for life	monthly for life
Retirement age	50	50
Monthly benefits, as a % of eligible compensation	2.4% to 3%	2% to 2.7%
Required employee contribution rates	9%	
Required employer contribution rates	17.689% + $112,537	12.082%

Contributions – Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. Funding contributions for the Plan are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

Beginning in fiscal year 2016, CalPERS collects employer contributions for the Plan as a percentage of payroll for the normal cost portion as noted in the rates above and as a dollar amount for contributions toward the unfunded liability. The dollar amounts are billed on a monthly basis. The City's required contribution for the unfunded liability was $486,648 in fiscal year 2017.

The City's contributions to the Plan for the year ended June 30, 2017 were $813,911.

7. DEFINED BENEFIT PENSION PLAN – Continued

Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions

As of June 30, 2017, the City reported a liability of $6,672,556 for its proportionate share of the net pension liability. The City's net pension liability for the Plan is measured as of June 30, 2016, and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2015 rolled forward to June 30, 2016 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The City's proportionate share of the Plan's net pension liability as of June 30, 2015 and 2016 was as follows:

Proportion - June 30, 2015	0.102377%
Proportion - June 30, 2016	0.077112%
Change - Increase (Decrease)	-0.025265%

For the year ended June 30, 2017, the City recognized pension expense of $751,749. At June 30, 2017, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	$ 813,914	$ -
Differences between actual and expected experience	-	17,655
Changes in assumptions	-	308,726
Change in employer's proportion	491,495	1,517,774
Differences between the employer's contributions and the employer's proportionate share of contributions	1,706,066	-
Net differences between projected and actual earnings on plan investments	1,566,635	-
Total	$ 4,578,110	$ 1,844,155

The $813,914 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ending June 30,	
2018	$ 441,618
2019	380,116
2020	691,639
2021	406,668
2022	-
Thereafter	-

7. DEFINED BENEFIT PENSION PLAN – Continued

Actuarial Assumptions – The total pension liabilities in the June 30, 2015 actuarial valuations were determined using the following actuarial assumptions:

Valuation date	June 30, 2015
Measurement date	June 30, 2016
Actuarial cost method	entry-age normal
Actuarial assumptions:	
Discount rate	7.65%
Inflation	2.75%
Payroll growth	3.00%
Projected salary increase	(1)
Investment rate of return	7.65%
Mortality	(2)

(1) Depending on age, service and type of employment
(2) Derived using CalPERS' Membership Data for all Funds.

The underlying mortality assumptions and all other actuarial assumptions used in the June 30, 2015 valuation were based on the results of a January 2014 actuarial experience study for the period 1997 to 2011. Further details of the Experience Study can found on the CalPERS website.

Discount Rate – The discount rate used to measure the total pension liability was 7.65%. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on testing of the plans, the tests revealed the assets would not run out. Therefore, the current 7.65 percent discount rate is appropriate and the use of the municipal bond rate calculation is not necessary. The long term expected discount rate of 7.65 percent will be applied to all plans in the Public Employees Retirement Fund (PERF). The stress test results are presented in a detailed report called "GASB Crossover Testing Report" that can be obtained from the CalPERS' website under the GASB 68 section.

CalPERS is scheduled to review all actuarial assumptions as part of its regular Asset Liability Management (ALM) review cycle that is scheduled to be completed in February 2018. Any changes to the discount rate will require Board action and proper stakeholder outreach. For these reasons, CalPERS expects to continue using a discount rate net of administrative expenses for GASB 67 and 68 calculations through at least the 2017-18 fiscal year. CalPERS will continue to check the materiality of the difference in calculation until such time as they have changed their methodology.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating

7. DEFINED BENEFIT PENSION PLAN – Continued

the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These rates of return are net of administrative expenses.

Asset Class	New Strategic Allocation	Real Return Years 1 - 10 (1)	Real Return Years 11+ (2)
Global Equity	51%	5.25%	5.71%
Global Fixed Income	20%	0.99%	2.43%
Inflation Sensitive	6%	0.45%	3.36%
Private Equity	10%	6.83%	6.95%
Real Estate	10%	4.50%	5.13%
Infrastructure and Forestland	2%	4.50%	5.09%
Liquidity	1%	-0.55%	-1.05%

(1) An expected inflation of 2.5% used for this period.
(2) An expected inflation of 3.0% used for this period.

Sensitivity of the Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the City's proportionate share of the net pension liability for the Plan, calculated using the discount rate for the Plan, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

1% Decrease		6.65%
Net Pension Liability	$	10,582,438
Current Discount Rate		7.65%
Net Pension Liability	$	6,672,556
1% Increase		8.65%
Net Pension Liability	$	3,447,336

Pension Plan Fiduciary Net Position – Detailed information about the Plan's fiduciary net position is available in the separately issued CalPERS financial reports.

Payable to the Pension Plan

At June 30, 2017, the City reported no payables to the pension plan, for outstanding contributions required for the year ended June 30, 2017.

8. OTHER POST EMPLOYMENT BENEFITS

Plan Description

The City provides medical coverage for retirees and their spouses. This coverage is available for employees who satisfy the requirements for retirement under the California Public Employees Retirement System (PERS), which is age 50 or older with at least five years of State public agency service. The healthcare coverage provided by PERS meets the definition of Other Post-Employment Benefits (OPEB) as described in GASB Statement 45.

Medical plan benefits are provided through PERS, as permitted by the Public Employees' Medical and Hospital and Care Act (PEMHCA). As a PEMHCA employer, the City has elected the equal contribution method, where the contribution will remain the same annually.

Funding Policy

The contribution requirements of the City are established and may be amended by the City Council. The required contribution is based on pay-as-you-go financing requirements. For fiscal year 2016-17, the City contributed $136,161 to the plan, which represents the total current premiums.

Annual OPEB Cost and Net OPEB Obligation

The City's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer (ARC). The City has elected to calculate the ARC and related information using the alternative measurement method permitted by GASB Statement 45 for employers in plans with fewer than one hundred total plan members. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not-to-exceed thirty years. The following table shows the components of the City's annual OPEB cost for the year, the amount contributed to the plan, and changes in the City's net OPEB obligation to the plan:

Annual Required Contribution	$ 178,550
Interest on Net OPEB Obligation	3,043
Amortization of Net OPEB Obligation	(4,618)
Annual OPEB Cost	176,975
Payments Made	(136,161)
Increase in Net OPEB Obligation	40,814
Net OPEB Obligation - Beginning of the Year	376,881
Net OPEB Obligation - End of Year	$ 417,695

The City's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2016-17 and the two preceding years were as follows:

Fiscal Year	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation
6/30/17	$ 176,975	77%	$ 417,695
6/30/16	188,909	70%	376,881
6/30/15	188,909	67%	320,469

8. OTHER POST EMPLOYMENT BENEFITS - Continued

Funded Status and Funding Progress

As of the most recent valuation, June 30, 2016, the actuarial accrued liability for benefits was $2,895,202, all of which was unfunded, with a funded ratio of 0.0%.

The projections of future benefit payments for an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The following simplifying assumptions were made:

Retirement for active employees – Based on the historical average retirement age for the covered group, active safety plan members were assumed to retire at age 56 and active miscellaneous plan members were assumed to retire at age 60, or at the first subsequent year in which the member would qualify for benefits.

Marital status – Marital status of members at the calculation date was assumed to continue throughout retirement.

Mortality – Life expectancies were based on mortality tables from the U.S. Census Bureau.

Health insurance premiums – 2016 health insurance premiums for retirees were used as the basis for calculation of the present value of total benefits to be paid.

Payroll growth rate – The expected long-term payroll growth rate was assumed to equal 2.30%.

Based on the historical and expected returns, a discount rate of 3.5 percent was used. In addition, as simplified version of the entry age actuarial cost method was used. The unfunded actuarial accrued liability is being amortized as a level of percentage of projected payroll on an open basis. The remaining amortization period at June 30, 2017 was twenty-nine years.

9. RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters for which the City carries insurance as of the 2016-17 fiscal year. In prior years the City was a member of an insurance pool (San Diego Pooled Insurance Program Authority) which provided various levels of pooled liability coverage and property insurance, subject to self-insured retention levels and deductibles.

As of the 2016-17 fiscal year, the City's insurance coverage is provided through the CSAC Excess Insurance Authority, as follows:

9. RISK MANAGEMENT – Continued

Program	Limits	SIR/ Deductible
Excess Workers' Compensation	Statutory	$ 125,000
General Liability	$ 25,000,000	100,000
Property	Various	5,000
Crime	15,000,000	2,500
Cyber Liability	Various	50,000
Excess Liability	25,000,000	25,000
Pollution	10M/100M	75,000

Claims liabilities of the City are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported (IBNR). The result of the process to estimate the claims liability is not an exact amount as it depends on many complex factors, such as inflation, changes in legal doctrines, and damage awards. Accordingly, claims are reevaluated periodically to consider the effects of inflation, recent claim settlement trends (including frequency and pay-out amounts), and other economic and social factors. Settlements have not exceeded coverage for each of the past three fiscal years.

The City's claims activity is reported in internal service funds. The following is a summary of changes in claims liabilities for the past three years:

	Fiscal Year Ending June 30,		
	2017	2016	2015
Beginning of Year	$ 188,787	$ 225,895	$ 393,999
Incurred Claims	528,750	94,846	-
Claim Payments	(28,142)	(131,954)	(168,104)
End of Year	$ 689,395	$ 188,787	$ 225,895

The estimated Claims Liability at June 30, 2017 of $689,395 is reported in the City's Governmental Activities and Business-type Activities in the following amounts: $494,163 and $195,232, respectively.

10. FUND BALANCES

The details of fund balances as of June 30, 2017 are as follows:

	General Fund	Housing Fund	Transnet Fund	Nonmajor Governmental Funds	Total
Nonspendable:					
Prepaid Items	$ 8,578	$ -	$ -	$ -	$ 8,578
Restricted for:					
Housing	-	7,235,458	-	-	7,235,458
Public Safety	-	-	-	761,986	761,986
Streets and Transportation	-	-	-	780,046	780,046
Community Development	-	-	-	247,822	247,822
Parks and Recreation	-	-	-	86,600	86,600
Unassigned	5,288,540	-	(728,296)	(61,184)	4,499,060
Total Fund Balances	$ 5,297,118	$ 7,235,458	$ (728,296)	$ 1,815,270	$ 13,619,550

11. JOINT POWERS AUTHORITY

The City is a member of the Heartland Communications Facility Authority (HCFA). HCFA was created to equip, maintain, operate and staff a facility which provides emergency call receiving and dispatching services to participating agencies. No determination has been made as to each participant's proportionate share of fund equity as of June 30, 2017.

Complete financial statements may be obtained at the City of El Cajon, Finance City, 200 E. Main Street, El Cajon, CA 92020.

12. SUCCESSOR AGENCY FOR THE FORMER REDEVELOPMENT AGENCY

A. Background

On December 29, 2011, the California Supreme Court upheld Assembly Bill X126 (the Bill) that provides for the dissolution of all redevelopment agencies in the State of California. This action impacted the reporting entity of the City since the City had previously reported its redevelopment agency as a blended component unit in the City's financial statements.

The Bill provides that upon dissolution of the redevelopment agency, either the City or another unit of local government will agree to serve as the "Successor Agency" to hold the assets of the dissolved redevelopment agency until they are distributed to other units of state and local government. On January 17, 2012, the City Council adopted Resolution No. 3071, electing to become the Successor Agency for the former redevelopment agency in accordance with the Bill.

After enactment of the law, which occurred on June 28, 2011, redevelopment agencies in the State of California were prohibited from entering into new projects, obligations or commitments. Subject to the control of a newly established oversight board, remaining assets can only be used to pay enforceable obligations in existence at the date of dissolution, including the completion of any unfinished projects that were subject to legally enforceable contractual commitments.

In future fiscal years, Successor Agencies will only be allocated revenue in the amount that is necessary to pay the estimated annual payments on enforceable obligations of the former redevelopment agency until all enforceable obligations of the prior redevelopment agency have been paid in full and all assets have been liquidated.

The Bill directs the State Controller of the State of California to review the propriety of any transfers of assets between redevelopment agencies and other public bodies that occurred in January 1, 2011. If the public body that received such transfers is not contractually committed to a third party for the expenditure or encumbrance of those assets, the State Controller is required to order the available assets to be transferred to the public body designated as the Successor Agency by the Bill.

The California Department of Finance has approved the Lemon Grove Successor Agency's Long-range Management Plan and has also issued a Finding of Completion. The State continues to monitor the Recognized Obligation Payment Schedule (ROPS) that is filed annually by the Successor Agency.

13. COMMITMENTS AND CONTINGENCIES

A. Grants

Amounts received or receivable from grant agencies are subject to audit and adjustment by grantor agencies. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures that maybe disallowed by the grantor cannot be determined at this time, although the government expects such amounts, if any, to be immaterial.

13. COMMITMENTS AND CONTINGENCIES – Continued

B. Successor Agency

Amounts paid and accrued for the year ended June 30, 2017 (and subsequent years in which the Successor Agency is in operation) are subject to review by various State agencies and the County in which the Successor Agency resides. If any expenses incurred by the Successor Agency are disallowed by the State agencies or County, the City, acting as the Successor Agency could be liable for the repayment of the disallowed costs from either its own funds or by the State withholding remittances normally paid to the City. The amount, if any, of expenses that may be disallowed by the State agencies or County cannot be determined at this time, although the Successor Agency expects such amounts, if any, to be immaterial.

C. Other Commitments and Contingencies

At June 30, 2017, the City had outstanding construction contracts of approximately $2.9 million. In addition, the City is a defendant in various pending lawsuits of a nature common to many similar jurisdictions. City management and legal counsel estimates that the potential claims against the City not covered by insurance resulting from such litigation would not materially affect the City's financial statements.

14. FUND DEFICITS

The following non-major funds have negative fund balance as of June 30, 2017:

Special Revenue Funds:	
Gas Tax	$ 21,785
TDA	31,682
Storm Water	6,302
Capital Project Funds:	
Main Street Promenade CFD	1,415

These deficits are expected to be eliminated with the receipt of grant awards and future revenues.

15. PRIOR PERIOD ADJUSTMENTS

The City recorded the following prior period adjustments, as described on the following page:

	General Fund	Nonmajor Funds	Sanitation Fund and Business-type Activities	Succ. Agency Private-purpose Trust Fund	Governmental Activities
	$ (3,719,687) (1)	$ 187,081 (3)	$ (57,901) (2)	$ 222,399 (4)	$ (3,719,687) (1)
	(62,157) (2)	-	-	(712,786) (5)	(62,157) (2)
	333,010 (9)	-	-	680 (2)	187,081 (3)
	-	-	-	(333,010) (9)	(196,443) (6)
	-	-	-	-	694,104 (5)
	-	-	-	-	(740,363) (7)
	-	-	-	-	177,875 (8)
	-	-	-	-	333,010 (9)
Total Adjusments	(3,448,834)	187,081	(57,901)	(822,717)	(3,326,580)
Beginning Balance	8,461,602	645,073	21,117,409	(13,179,146)	57,211,294
Restated Balance	$ 5,012,768	$ 832,154	$ 21,059,508	$ (14,001,863)	$ 53,884,714

15. PRIOR PERIOD ADJUSTMENTS – Continued

(1) To record an allowance for doubtful accounts for the amount due from the Successor Agency, due to the nature of the receivable (see Note 4).

(2) To record adjustments to payroll-related liability accounts applicable to prior fiscal years.

(3) To increase Fund Balance in the Transportation Mitigation Fund and Net Position in Governmental Activities for revenue reported as unearned in the prior year.

(4) To remove the Net Pension Liability and related balances from the Successor Agency Trust Fund.

(5) To move capital assets incorrectly reported in the Successor Agency Trust Fund in previous fiscal years to Governmental Activities.

(6) To remove amounts incorrectly reported as Construction in Progress in the previous fiscal year.

(7) Net increase in Governmental Activities long-term debt as follows: $(62,419) decrease in Compensated Absences; $402,508 increase in Capital Leases; $400,274 increase in the Net Pension Liability.

(8) Net increase for Deferred Outflows and Inflows related to the Net Pension Liability, previously reported in the Successor Agency.

(9) To record loans from the City to the Successor Agency, repaid in the 2016-17 fiscal year, but previously unrecorded.

16. INTERFUND RECEIVABLES, PAYABLES, AND TRANSFERS

The $936,434 reported in the General Fund as due from other funds consists of $770,653 due from the Transnet Special Revenue Fund and $165,781 due from nonmajor governmental funds. These temporary, interfund borrowings result from routine cash flows and are expected to be repaid within the next fiscal year.

Transfers of $552,400 and $100,000 were made from the Sanitation Fund to the General Fund and the Gas Tax Fund, respectively, in accordance with the adopted budget for administrative costs.

REQUIRED SUPPLEMENTARY INFORMATION

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - General Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Taxes and Special Assessments	$ 10,788,000	$ 10,613,000	$ 10,882,008	$ 269,008
Licenses, Fees, and Permits	640,000	570,000	464,877	(105,123)
Fines and Forfeitures	146,000	146,000	229,624	83,624
Intergovernmental Revenues	17,000	17,000	32,368	15,368
Charges for Services	375,700	375,700	440,756	65,056
Use of Money and Property	243,320	243,320	280,599	37,279
Other Revenues	10,000	10,000	497,209	487,209
Total Revenues	12,220,020	11,975,020	12,827,441	852,421
EXPENDITURES				
Current:				
General Government	1,215,800	1,143,820	1,025,265	118,555
Public Safety	9,682,300	9,694,300	9,710,139	(15,839)
Public Works	1,345,000	1,344,980	1,419,603	(74,623)
Community Development	683,700	683,700	566,562	117,138
Capital Outlay	-	210,000	194,550	15,450
Debt Service:				
Principal	76,545	76,545	76,545	-
Interest	10,155	10,155	10,143	12
Total Expenditures	13,013,500	13,163,500	13,002,807	160,693
Excess (Deficiency) of Revenues over Expenditures	(793,480)	(1,188,480)	(175,366)	1,013,114
OTHER FINANCING SOURCES (USES)				
Transfers In	1,028,600	1,028,600	685,400	(343,200)
Transfers Out	(235,120)	(235,120)	(225,684)	9,436
Total Other Financing Sources (Uses)	793,480	793,480	459,716	(333,764)
Net Change in Fund Balances	-	(395,000)	284,350	679,350
Fund Balance, Beginning of Year	5,012,768	5,012,768	5,012,768	-
Fund Balance, End of Year	$ 5,012,768	$ 4,617,768	$ 5,297,118	$ 679,350

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Housing Special Revenue Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Intergovernmental Revenues	$ -	$ -	$ 1,486,326	$ 1,486,326
Total Revenues	-	-	1,486,326	1,486,326
EXPENDITURES				
Capital Outlay	1,500,000	1,500,000	1,337,304	162,696
Total Expenditures	1,500,000	1,500,000	1,337,304	162,696
Excess (Deficiency) of Revenues over Expenditures	(1,500,000)	(1,500,000)	149,022	1,649,022
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	(1,500,000)	(1,500,000)	149,022	1,649,022
Fund Balance, Beginning of Year	7,086,436	7,086,436	7,086,436	-
Fund Balance, End of Year	$ 5,586,436	$ 5,586,436	$ 7,235,458	$ 1,649,022

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Transnet Special Revenue Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Intergovernmental Revenue	$ 2,346,700	$ 3,527,687	$ 2,007,654	$ (1,520,033)
Other	-	-	-	-
Total Revenues	2,346,700	3,527,687	2,007,654	(1,520,033)
EXPENDITURES				
Current:				
General Government	93,600	93,600	76,528	17,072
Capital Outlay	2,260,000	3,527,687	2,357,785	1,169,902
Total Expenditures	2,353,600	3,621,287	2,434,313	1,186,974
Excess (Deficiency) of Revenues over Expenditures	(6,900)	(93,600)	(426,659)	(333,059)
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	(6,900)	(93,600)	(426,659)	(333,059)
Fund Balance, Beginning of Year	(301,637)	(301,637)	(301,637)	-
Fund Balance, End of Year	$ (308,537)	$ (395,237)	$ (728,296)	$ (333,059)

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

Schedule of the City's Proportionate Share of the Net Pension Liability
Last 10 Years*

Measurement Date	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Employee Payroll	Proportionate Share of the Net Pension Liability as a % of Payroll	Plan Fiduciary Net Position as a % of the Total Pension Liability
2016	0.077112%	$ 6,672,556	$ 3,966,818	168.21%	74.06%
2015	0.102377%	7,027,037	4,140,577	169.71%	78.40%
2014	0.101819%	6,335,672	3,916,214	161.78%	79.82%

Notes to the Schedule of the City's Proportionate Share of the Net Pension Liability

Benefit Changes: The figures above do not include any liability impact that may have resulted from plan changes which occurred after the June 30, 2015 valuation date. This applies for voluntary benefit changes as well as any offers of Two Years Additional Service Credit (a.k.a. Golden Handshakes).

Changes in Assumptions: None

*Fiscal year 2015 was the first year of implementation; therefore, not all 10 years of information are available.

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

Schedule of Plan Contributions
Last 10 Years*

Fiscal Year	Contractually Required Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency/ (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 813,911	$ (813,911)	$ -	$ 4,129,783	19.71%
2016	909,279	(2,737,595)	(1,828,316)	3,966,818	69.01%
2015	929,245	(1,194,245)	(265,000)	3,854,444	30.98%

Notes to the Schedule of Plan Contributions

Valuation Date: 6/30/2013, 6/30/2014, and 6/30/2015

*Fiscal year 2015 was the first year of implementation; therefore, not all 10 years of information are available.

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

SCHEDULE OF FUNDING PROGRESS

Other Post-Employment Benefits Plan

Actuarial Valuation Date	Actuarial Asset Value	Entry Age Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio AVA	Covered Payroll	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll
	(a)	(b)	(b) - (a)	(a)/(b)	(c)	[(b)-(a)]/(c)
06/30/12	$ -	$ 2,697,679	$ 2,697,679	0.00%	$ 3,742,383	72.1%
06/30/14	-	2,803,349	2,803,349	0.00%	3,916,214	71.6%
06/30/16	-	2,895,202	2,895,202	0.00%	3,854,444	75.1%

1. BUDGETS AND BUDGETARY ACCOUNTING

A. Budgetary Control and Budgetary Accounting

The City Council approves each fiscal year's budget submitted by the City Manager prior to the beginning of the new fiscal year. Public hearings are conducted prior to its adoption by the council. Supplemental appropriations, where required during the period, are also approved by the Council. Budget transfers that affect the total appropriations for any fund require City Council approval. Budget transfers within a budget code with no change in appropriation within the budget code are approved by the City Manager only and do not require approval by the City Council. A budget code could be a program, or a division of a City, or a City. In most cases, expenditures may not legally exceed appropriations at the budget code level for the General Fund, and fund level for Special Revenue, Capital Projects, and Debt Service Funds.

At fiscal year-end, all operating budget appropriations lapse with the exception of encumbered and continuing appropriations.

Budgets are adopted for all funds.

B. Encumbrances

Encumbrances are estimations of costs related to unperformed contracts for goods and services. These commitments are recorded for budgetary control purposes in the General, Special Revenue, and Capital Projects funds. They represent the estimated amount of the expenditure ultimately to result if unperformed contracts in-process at fiscal year-end are completed. They do not constitute expenditures or estimated liabilities.

C. Continuing Appropriations

The unexpected and unencumbered appropriations that are available and recommended for continuation are approved by the City Council for carryover to the following fiscal year.

D. Budget Basis of Accounting

Budgets for governmental funds are adopted on a basis consistent with accounting principles generally accepted in the United States of America (US GAAP).

SUPPLEMENTARY INFORMATION

City of Lemon Grove
Non-major Governmental Funds
Year Ended June 30, 2017

Special Revenue Funds

Gas Tax Fund is supported by revenue from the State gas tax fund. Fund proceeds may be used to research, plan, construct, improve, maintain and operate local streets.

Parkland Dedication Fund accounts for fees in-lieu of dedicating park land that are to be used for the purchase of park land, the development of new parks, or the major rehabilitation of existing parks.

Supplemental Law Enforcement Service Fund accounts for State grant proceeds to be used to augment the staffing level of Sheriff deputies.

Sundry Grants Fund accounts for grants currently being administered by the City.

CDBG Fund accounts for grant proceeds from the Community Development Block Grant program. Funds are expended and then reimbursed by the County of San Diego.

TDA Fund accounts for transit proceeds allocated from MTS for maintenance of landscaping along the trolley corridor and maintenance of trolley stations and bus shelters throughout the City.

Lighting District Fund accounts for activities relating to the Roadway Lighting District which provides for street light benefits and enhanced lighting benefits.

Storm Water Fund accounts for designated storm water program fees and support the City's storm water program - a State and Federal mandated program.

Household Hazardous Waste Fund accounts for the City's household hazardous waste disposal program. This program is supported by AB 939 funds which are collected for this and recycling related programs. The City relies on this fund for contractual services to provide household hazardous waste events and to promote a higher level of recycling within the City.

Wild Flower Assessment Fund accounts for the Wildflower Landscaping Maintenance Assessment District.

PEG (Public/Education/Government) Fund accounts for designated monies from cable franchisees that operate within the City. The use of these monies is restricted to capital items that enhance or facilitate public access to government information.

Serious Traffic Offender Fund accounts for impound fees to pay for Sheriff traffic division overtime and other traffic related expenses.

Capital Project Funds

Street Construction Fund accounts for amounts which are restricted for larger street projects.

Sidewalk Reserve Fund accounts for amounts restricted for larger sidewalk projects.

Main Street Promenade CFD Fund accounts for voter-approved assessments for capital improvements.

Safety Capital Purchases Fund accounts for one-time "SAFE" program monies restricted for public safety capital expenditures.

Transportation Mitigation Fund accounts for fees related to the passage of the Transnet extension. These fees represent per housing unit fees for new residential development. Expenditures from this fund are to be used to initiate street improvement projects on a major arterial within the City.

City of Lemon Grove
Combining Balance Sheet
Non-major Governmental Funds
June 30, 2017

	Special Revenue			
	Gas Tax	Parkland Dedication	Supplemental Law Enforcement Service	Sundry Grants
ASSETS				
Cash and Investments	$ 802	$ 86,456	$ 43,899	$ 78,521
Accounts Receivable	-	144	-	41,922
Prepaids	-	-	-	-
Total Assets	$ 802	$ 86,600	$ 43,899	$ 120,443
LIABILITIES				
Accounts Payable	$ 168	$ -	$ -	$ 20,694
Accrued Liabilities	22,419	-	-	-
Deposits	-	-	-	-
Due to Other Funds	-	-	-	-
Total Liabilities	22,587	-	-	20,694
DEFERRED INFLOWS OF RESOURCES				
Unavailable Revenues - Grants Receivable	-	-	-	20,000
Total Deferred Inflows of Resources	-	-	-	20,000
FUND BALANCE (DEFICITS)				
Restricted	-	86,600	43,899	79,749
Committed	-	-	-	-
Unassigned	(21,785)	-	-	-
Total Fund Balances	(21,785)	86,600	43,899	79,749
Total Liabilities, Deferred Inflows of Resources and Fund Balances (Deficits)	$ 802	$ 86,600	$ 43,899	$ 120,443

Special Revenue						
CDBG	TDA	Lighting District	Storm Water	Household Hazardous Waste	Wild Flower Assessment
$ -	$ -	$ 394,864	$ -	$ 194,456	$ 4,858
134,838	123,597	2,739	-	2,137	6
-	-	-	-	-	-
$ 134,838	$ 123,597	$ 397,603	$ -	$ 196,593	$ 4,864
$ 6,543	$ 9,920	$ 18,818	$ 5,248	$ 1,842	$ 920
-	1,229	3,402	1,054	1,039	(493)
-	-	-	-	61,503	-
128,295	36,360	-	-	-	-
134,838	47,509	22,220	6,302	64,384	427
-	107,770	-	-	-	-
-	107,770	-	-	-	-
-	-	375,383	-	132,209	4,437
-	-	-	-	-	-
-	(31,682)	-	(6,302)	-	-
-	(31,682)	375,383	(6,302)	132,209	4,437
$ 134,838	$ 123,597	$ 397,603	$ -	$ 196,593	$ 4,864

Continued

City of Lemon Grove
Combining Balance Sheet
Non-major Governmental Funds - Continued
June 30, 2017

	Special Revenue		Capital Projects	
	PEG (Public/ Education/ Government)	Serious Traffic Offender Program	Street Construction	Sidewalk Reserve
ASSETS				
Cash and Investments	$ 227,809	$ 29,291	$ 158,967	$ 23,223
Accounts Receivable	15,576	48	263	38
Prepaids	-	-	-	-
Total Assets	$ 243,385	$ 29,339	$ 159,230	$ 23,261
LIABILITIES				
Accounts Payable	$ -	$ (1,235)	$ -	$ -
Accrued Liabilities	-	79	-	-
Deposits	-	-	-	-
Due to Other Funds	-	-	-	-
Total Liabilities	-	(1,156)	-	-
DEFERRED INFLOWS OF RESOURCES				
Unavailable Revenues - Grants Receivable	-	-	-	-
Total Deferred Inflows of Resources	-	-	-	-
FUND BALANCE (DEFICITS)				
Restricted	243,385	30,495	159,230	23,261
Committed	-	-	-	-
Unassigned	-	-	-	-
Total Fund Balances	243,385	30,495	159,230	23,261
Total Liabilities, Deferred Inflows of Resources and Fund Balances (Deficits)	$ 243,385	$ 29,339	$ 159,230	$ 23,261

Capital Projects			
Main Street Promenade CFD	Safety Capital Purchases	Transportation Mitigation	Total Non-major Governmental Funds
$ -	$ 180,000	$ 516,951	$ 1,940,097
-	-	855	322,163
-	-	-	-
$ -	$ 180,000	$ 517,806	$ 2,262,260
$ 289	$ -	$ -	$ 63,207
-	-	-	28,729
-	-	-	61,503
1,126	-	-	165,781
1,415	-	-	319,220
-	-	-	127,770
-	-	-	127,770
-	180,000	517,806	1,876,454
-	-	-	-
(1,415)	-	-	(61,184)
(1,415)	180,000	517,806	1,815,270
$ -	$ 180,000	$ 517,806	$ 2,262,260

City of Lemon Grove
Combining Statement of Revenues, Expenditures and Changes in Fund Balances
Non-major Governmental Funds
Year Ended June 30, 2017

	Special Revenue			
	Gas Tax	Parkland Dedication	Supplemental Law Enforcement Service	Sundry Grants
REVENUES				
Taxes	$ -	$ -	$ -	$ -
Intergovernmental Revenues	473,051	-	129,324	1,140,311
Charges for Services	-	16,137	-	-
Use of Money and Property	-	594	-	-
Other	-	-	-	-
Total Revenues	473,051	16,731	129,324	1,140,311
EXPENDITURES				
Current:				
General Government	-	-	-	-
Public Safety	-	-	-	-
Public Works	592,346	-	-	388,634
Community Development	-	-	-	173,762
Capital Outlay	-	43,317	-	-
Total Expenditures	592,346	43,317	-	562,396
Excess (Deficiency) of Revenues Over Expenditures	(119,295)	(26,586)	129,324	577,915
OTHER FINANCING SOURCES (USES)				
Transfers In	100,000	-	-	109,134
Transfers Out	-	-	(100,000)	-
Total Other Financing Sources (Uses)	100,000	-	(100,000)	109,134
Net Change in Fund Balances	(19,295)	(26,586)	29,324	687,049
Fund Balances, Beginning of Year (Restated)	(2,490)	113,186	14,575	(607,300)
Fund Balances, End of Year	$ (21,785)	$ 86,600	$ 43,899	$ 79,749

Special Revenue					
CDBG	TDA	Lighting District	Storm Water	Household Hazardous Waste	Wild Flower Assessment
$ -	$ -	$ 272,231	$ -	$ 26,522	$ 9,585
134,838	123,593	-	-	-	-
-	-	-	57,702	-	-
-	125	2,696	-	1,161	20
-	-	-	-	54	-
134,838	123,718	274,927	57,702	27,737	9,605
-	-	-	-	35,767	-
-	-	-	-	-	-
-	31,991	301,035	181,333	-	-
-	-	-	-	-	9,852
134,838	85,150	-	-	-	-
134,838	117,141	301,035	181,333	35,767	9,852
-	6,577	(26,108)	(123,631)	(8,030)	(247)
-	-	-	117,329	-	-
-	(17,400)	(14,300)	-	(1,979)	(100)
-	(17,400)	(14,300)	117,329	(1,979)	(100)
-	(10,823)	(40,408)	(6,302)	(10,009)	(347)
-	(20,859)	415,791	-	142,218	4,784
$ -	$ (31,682)	$ 375,383	$ (6,302)	$ 132,209	$ 4,437

Continued

City of Lemon Grove
Combining Statement of Revenues, Expenditures and Changes in Fund Balances
Non-major Governmental Funds - Continued
Year Ended June 30, 2017

	Special Revenue		Capital Projects	
	PEG (Public/ Education/ Government)	Serious Traffic Offender Program	Street Construction	Sidewalk Reserve
REVENUES				
Taxes	$ -	$ -	$ -	$ -
Intergovernmental Revenues	-	-	-	-
Charges for Services	61,883	-	-	-
Use of Money and Property	1,298	200	955	139
Other	-	6,890	-	-
Total Revenues	63,181	7,090	955	139
EXPENDITURES				
Current:				
General Government	34,908	-	-	-
Public Safety	-	12,620	-	-
Public Works	-	-	-	-
Community Development	-	-	-	-
Capital Outlay	-	-	-	-
Total Expenditures	34,908	12,620	-	-
Excess (Deficiency) of Revenues Over Expenditures	28,273	(5,530)	955	139
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	28,273	(5,530)	955	139
Fund Balances, Beginning of Year	215,112	36,025	158,275	23,122
Fund Balances, End of Year	$ 243,385	$ 30,495	$ 159,230	$ 23,261

Capital Projects			
Main Street Promenade CFD	Safety Capital Purchases	Transportation Mitigation	Total Non-major Governmental Funds
$ 11,746	$ -	$ -	$ 320,084
-	-	-	2,001,117
-	-	51,854	187,576
-	-	2,997	10,185
-	-	-	6,944
11,746	-	54,851	2,525,906
-	-	-	70,675
11,558	-	-	24,178
-	-	-	1,495,339
-	-	-	183,614
-	-	-	263,305
11,558	-	-	2,037,111
188	-	54,851	488,795
-	-	-	326,463
-	-	-	(133,779)
-	-	-	192,684
188	-	54,851	681,479
(1,603)	180,000	462,955	1,133,791
$ (1,415)	$ 180,000	$ 517,806	$ 1,815,270

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - State Gas Tax Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 543,100	$ 473,051	$ (70,049)
Total Revenues	543,100	473,051	(70,049)
EXPENDITURES			
Current:			
Public Works	623,100	592,346	30,754
Total Expenditures	623,100	592,346	30,754
Excess (Deficiency) of Revenues Over Expenditures	(80,000)	(119,295)	(39,295)
OTHER FINANCING SOURCES (USES)			
Transfers In	200,000	100,000	(100,000)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	200,000	100,000	(100,000)
Net Change in Fund Balances	120,000	(19,295)	(139,295)
Fund Balance, Beginning of Year	(2,490)	(2,490)	-
Fund Balance, End of Year	$ 117,510	$ (21,785)	$ (139,295)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Parkland Dedication
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 10,000	$ 16,137	$ 6,137
Use of Money and Property	-	594	594
Total Revenues	10,000	16,731	6,731
EXPENDITURES			
Capital Outlay	80,000	43,317	36,683
Total Expenditures	80,000	43,317	36,683
Excess (Deficiency) of Revenues Over Expenditures	(70,000)	(26,586)	43,414
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(70,000)	(26,586)	43,414
Fund Balance, Beginning of Year	113,186	113,186	-
Fund Balance, End of Year	$ 43,186	$ 86,600	$ 43,414

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - SLES Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 100,000	$ 129,324	$ 29,324
Total Revenues	100,000	129,324	29,324
EXPENDITURES			
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	100,000	129,324	29,324
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(100,000)	(100,000)	-
Total Other Financing Sources (Uses)	(100,000)	(100,000)	-
Net Change in Fund Balances	-	29,324	29,324
Fund Balance, Beginning of Year	14,575	14,575	-
Fund Balance, End of Year	$ 14,575	$ 43,899	$ 29,324

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Sundry Grants Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 453,560	$ 1,140,311	$ 686,751
Total Revenues	453,560	1,140,311	686,751
EXPENDITURES			
Current:			
Public Works	392,855	388,634	(4,221)
Community Development	174,060	173,762	(298)
Total Expenditures	566,915	562,396	4,519
Excess (Deficiency) of Revenues over Expenditures	(113,355)	577,915	691,270
OTHER FINANCING SOURCES (USES)			
Transfers In	113,355	109,134	(4,221)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	113,355	109,134	(4,221)
Net Change in Fund Balances	-	687,049	687,049
Fund Balance, Beginning of Year	(607,300)	(607,300)	-
Fund Balance, End of Year	$ (607,300)	$ 79,749	$ 687,049

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - CDBG Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenue	$ 179,500	$ 134,838	$ (44,662)
Total Revenues	179,500	134,838	(44,662)
EXPENDITURES			
Capital Outlay	179,500	134,838	44,662
Total Expenditures	179,500	134,838	44,662
Excess (Deficiency) of Revenues over Expenditures	-	-	-
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	-	-	-
Fund Balance, Beginning of Year	-	-	-
Fund Balance, End of Year	$ -	$ -	$ -

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - TDA Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenue	$ 121,200	$ 123,593	$ 2,393
Use of Money and Property	100	125	25
Other	237,400	-	(237,400)
Total Revenues	358,700	123,718	(234,982)
EXPENDITURES			
Current:			
Public Works	54,240	31,991	22,249
Capital Outlay	52,700	85,150	(32,450)
Total Expenditures	106,940	117,141	(10,201)
Excess (Deficiency) of Revenues over Expenditures	251,760	6,577	(245,183)
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(17,400)	(17,400)	-
Total Other Financing Sources (Uses)	(17,400)	(17,400)	-
Net Change in Fund Balances	234,360	(10,823)	(245,183)
Fund Balance, Beginning of Year	(20,859)	(20,859)	-
Fund Balance, End of Year	$ 213,501	$ (31,682)	$ (245,183)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Lighting District Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 251,700	$ 272,231	$ 20,531
Use of Money and Property	900	2,696	1,796
Total Revenues	252,600	274,927	22,327
EXPENDITURES			
Current:			
Public Works	318,750	301,035	17,715
Total Expenditures	318,750	301,035	17,715
Excess (Deficiency) of Revenues over Expenditures	(66,150)	(26,108)	40,042
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(14,300)	(14,300)	-
Total Other Financing Sources (Uses)	(14,300)	(14,300)	-
Net Change in Fund Balances	(80,450)	(40,408)	40,042
Fund Balance, Beginning of Year	415,791	415,791	-
Fund Balance, End of Year	$ 335,341	$ 375,383	$ 40,042

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Storm Water Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 68,300	$ 57,702	$ (10,598)
Total Revenues	68,300	57,702	(10,598)
EXPENDITURES			
Current:			
Public Works	203,420	181,333	22,087
Total Expenditures	203,420	181,333	22,087
Excess (Deficiency) of Revenues over Expenditures	(135,120)	(123,631)	11,489
OTHER FINANCING SOURCES (USES)			
Transfers In	135,120	117,329	(17,791)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	135,120	117,329	(17,791)
Net Change in Fund Balances	-	(6,302)	(6,302)
Fund Balance, Beginning of Year	-	-	-
Fund Balance, End of Year	$ -	$ (6,302)	$ (6,302)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Household Hazardous Waste Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 20,000	$ 26,522	$ 6,522
Use of Money and Property	400	1,161	761
Other	-	54	54
Total Revenues	20,400	27,737	7,337
EXPENDITURES			
Current:			
General Government	60,320	35,767	24,553
Total Expenditures	60,320	35,767	24,553
Excess (Deficiency) of Revenues over Expenditures	(39,920)	(8,030)	31,890
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(6,200)	(1,979)	4,221
Total Other Financing Sources (Uses)	(6,200)	(1,979)	4,221
Net Change in Fund Balances	(46,120)	(10,009)	36,111
Fund Balance, Beginning of Year	142,218	142,218	-
Fund Balance, End of Year	$ 96,098	$ 132,209	$ 36,111

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Wildflower Assessment Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 9,100	$ 9,585	$ 485
Use of Money and Property	-	20	20
Total Revenues	9,100	9,605	505
EXPENDITURES			
Current:			
Community Development	16,570	9,852	6,718
Total Expenditures	16,570	9,852	6,718
Excess (Deficiency) of Revenues over Expenditures	(7,470)	(247)	7,223
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(100)	(100)	-
Total Other Financing Sources (Uses)	(100)	(100)	-
Net Change in Fund Balances	(7,570)	(347)	7,223
Fund Balance, Beginning of Year	4,784	4,784	-
Fund Balance, End of Year	$ (2,786)	$ 4,437	$ 7,223

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - PEG Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 30,000	$ 61,883	$ 31,883
Use of Money and Property	500	1,298	798
Total Revenues	30,500	63,181	32,681
EXPENDITURES			
Current:			
General Government	37,000	34,908	2,092
Total Expenditures	37,000	34,908	2,092
Excess (Deficiency) of Revenues Over Expenditures	(6,500)	28,273	34,773
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(6,500)	28,273	34,773
Fund Balance, Beginning of Year	215,112	215,112	-
Fund Balance, End of Year	$ 208,612	$ 243,385	$ 34,773

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Serious Traffic Offender Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 100	$ 200	$ 100
Other	9,500	6,890	(2,610)
Total Revenues	9,600	7,090	(2,510)
EXPENDITURES			
Current:			
Public Safety	26,950	12,620	14,330
Total Expenditures	26,950	12,620	14,330
Excess (Deficiency) of Revenues Over Expenditures	(17,350)	(5,530)	11,820
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(17,350)	(5,530)	11,820
Fund Balance, Beginning of Year	36,025	36,025	-
Fund Balance, End of Year	$ 18,675	$ 30,495	$ 11,820

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Street Construction Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 400	$ 955	$ 555
Total Revenues	400	955	555
EXPENDITURES			
Capital Outlay	150,000	-	150,000
Total Expenditures	150,000	-	150,000
Excess (Deficiency) of Revenues over Expenditures	(149,600)	955	150,555
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(149,600)	955	150,555
Fund Balance, Beginning of Year	158,275	158,275	-
Fund Balance, End of Year	$ 8,675	$ 159,230	$ 150,555

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Sidewalk Reserve Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 50	$ 139	$ 89
Total Revenues	50	139	89
EXPENDITURES			
Capital Outlay	-	-	-
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	50	139	89
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	50	139	89
Fund Balance, Beginning of Year	23,122	23,122	-
Fund Balance, End of Year	$ 23,172	$ 23,261	$ 89

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Main Street Promenade Community Facilities District
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 14,600	$ 11,746	$ (2,854)
Total Revenues	14,600	11,746	(2,854)
EXPENDITURES			
Current:			
Public Safety	14,000	11,558	2,442
Total Expenditures	14,000	11,558	2,442
Excess (Deficiency) of Revenues over Expenditures	600	188	(412)
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	600	188	(412)
Fund Balance, Beginning of Year	(1,603)	(1,603)	-
Fund Balance, End of Year	$ (1,003)	$ (1,415)	$ (412)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Safety Capital Purchases Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Other	$ -	$ -	$ -
Total Revenues	-	-	-
EXPENDITURES			
Capital Outlay	-	-	-
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	-	-	-
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	-	-	-
Fund Balance, Beginning of Year	180,000	180,000	-
Fund Balance, End of Year	$ 180,000	$ 180,000	$ -

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Transportation Mitigation Capital Project Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 100,000	$ 51,854	$ (48,146)
Use of Money and Property	-	2,997	2,997
Total Revenues	100,000	54,851	(45,149)
EXPENDITURES			
Capital Outlay	557,900	-	557,900
Total Expenditures	557,900	-	557,900
Excess (Deficiency) of Revenues Over Expenditures	(457,900)	54,851	512,751
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(457,900)	54,851	512,751
Fund Balance, Beginning of Year	462,955	462,955	-
Fund Balance, End of Year	$ 5,055	$ 517,806	$ 512,751


Van Lant &
Fankhanel, LLP
Certified Public Accountants

Attachment B

Comprehensive Annual Financial Report

City of Lemon Grove

Annual Financial Report

For the Fiscal Year Ended June 30, 2017

Van Lant & Fankhanel, LLP
Certified Public Accountants

CITY OF LEMON GROVE

FINANCIAL STATEMENTS

Year Ended June 30, 2017

City of Lemon Grove
Financial Statements
June 30, 2017

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Van Lant & Fankhanel, LLP
Certified Public Accountants

Independent Auditor's Report

The Honorable City Council
City of Lemon Grove, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove (City), as of and for the year ended June 30, 2017, and the related notes to the financial statements which collectively comprise the City's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

Van Lant & Fankhanel, LLP
25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove, as of June 30, 2017, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and other required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the City's basic financial statements. The schedules listed in the supplementary information section of the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules listed in the supplementary information section are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules listed in the supplementary information section are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued a report dated April 10, 2018 on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

April 10, 2018

As management of the City of Lemon Grove (City) we offer readers of the City's Annual Financial Report this narrative overview and analysis of the financial activities of the City for the fiscal year ended June 30, 2017. We encourage readers to consider the information presented here in conjunction with the Basic Financial Statements and attached notes.

FINANCIAL HIGHLIGHTS

- The assets plus deferred outflows of the City exceeded its liabilities and deferred inflows of the City by $78.2 million.
- The net position value decreased from the previous year by $0.1 million, or 0.2 percent.
- The City's governmental funds reported a combined ending fund balance of $13.6 million, a decrease from the previous year of $2.6 million, or 16.1 percent. The main drivers in the decrease were an increase in public safety and public works expenditures of 1.0 million and 1.1 million respectively.
- At the end of the current fiscal year, the General Fund unrestricted fund balance (the total of the committed, assigned, and unassigned components of fund balance) was $5.3 million, or approximately 40.7% of total General Fund expenditures.
- The City's capital assets (net of depreciation) increased by $3.1 million and total outstanding long-term debt increased by $1.0 million during the current fiscal year.

OVERVIEW OF THE ANNUAL FINANCIAL REPORT

A major component of the Financial Section of the City's Annual Financial Report is the Basic Financial Statements, and is comprised of three components: 1) government-wide financial statements, 2) governmental fund financial statements, and 3) notes to the basic financial statements. This report also contains other supplementary information in addition to the basic financial statements.

Government-wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business.

The government-wide financial statements distinguish functions that are principally supported by taxes and intergovernmental revenues *(governmental activities)* from other functions that are intended to recover all or a significant portion of their costs through user fees and charges *(business-type activities)*. The governmental activities of the City include general government, public safety, public works, community services, and development services. The business-type activity of the City is the Lemon Grove Sanitation District.

Also included in the government-wide financial statements are the Lemon Grove Sanitation District (Sanitation District), a blended component unit, and the Lemon Grove Lighting District (Lighting District), a blended component unit. Blended component units, although legally separate entities, are, in substance, part of the primary government's operations and are included as part of the primary government. While the Sanitation District and Lighting District are legally separate agencies, their governing board consists entirely of City Council members.

Statement of Net Position: This statement presents information on all of the City's assets and liabilities, with the difference between the two reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The following schedule displays a summary breakdown of the City's statement of net position:

Comparative Statements of Position									
June 30, 2017 and 2016									
(Amounts in Millions)									
	Governmental Activities			Business-Type Activities			Citywide Total		
	2017	2016	Change	2017	2016	Change	2017	2016	Change
Assets:									
Cash and investments	8.6	6.1	2.5	16.8	16.5	0.3	25.4	22.6	2.8
Other assets	11.8	15.3	(3.5)	0.1	0.1	(0.0)	11.9	15.4	(3.5)
Capital assets, net	43.8	41.6	2.2	6.6	5.7	0.9	50.4	47.3	3.1
Total Assets	64.2	63.0	1.2	23.5	22.3	1.2	87.6	85.3	2.3
Deferred Outflows of Resources:									
Deferred Outflows	3.6	2.7	0.9	1.0	1.0	-	4.6	3.7	0.9
Total Deferred Outflows	3.6	2.7	0.9	1.0	1.0	-	4.6	3.7	0.9
Liabilities:									
Long-term liabilities	7.1	5.7	1.4	1.9	1.9	-	9.0	7.6	1.4
Other Liabilities	3.2	2.1	1.1	0.1	0.1	-	3.3	2.2	1.1
Total Liabilities	10.3	7.8	2.5	2.0	2.0	-	12.3	9.8	2.5
Deferred Inflows of Resources:									
Deferred inflows	1.4	0.7	0.7	0.5	0.1	0.4	1.9	0.8	1.1
Total Deferred Inflows	1.4	0.7	0.7	0.5	0.1	0.4	1.9	0.8	1.1
Net Position:									
Net investment in capital assets	43.5	41.5	2.0	6.6	5.7	0.9	50.0	47.2	2.8
Restricted	10.6	10.4	0.2	-	-	-	10.6	10.4	0.2
Unrestricted	2.1	5.3	(3.2)	15.4	15.4	-	17.5	20.7	(3.2)
Total Net Position	56.2	57.2	(1.0)	21.9	21.1	0.9	78.2	78.3	(0.1)

The City's total net position decreased by 0.2 percent from last year. Net position from governmental activities decreased by 1.8 percent while net position from business activities increased by 4.3 percent. The City's assets exceeded its liabilities by approximately $78.0 million.

Approximately 64 percent of the City's net position reflect its investment in capital assets (i.e., land, buildings, infrastructure, and equipment), less any related debt used to acquire those assets that is still outstanding. The City uses these capital assets to provide services to residents; consequently, these assets are not available for future spending. Although the City's investment is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

Approximately 13.6 percent of the City's net assets reflect resources that are subject to external restrictions as to how they may be used. These restrictions are typically imposed by parties outside the government, such as creditors, grantors, and laws or regulations of other governments.

Statement of Activities: This statement presents information showing how the City's net position changed during the most recent fiscal year. All changes in position are reported as soon as the underlying events giving rise to the change occurs, *regardless of the timing of related cash flows*. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in the future fiscal periods (e.g., uncollected taxes, and earned but unused vacation leave).

The following schedule shows condensed financial information from the statement of activities:

Comparative Statements of Activity
June 30, 2017 and 2016
(Amounts in Millions)

	Governmental Activities			Business-Type Activities			Citywide Total		
	2017	2016	Change	2017	2016	Change	2017	2016	Change
Revenues:									
Program revenues:									
Charges for Services	1.9	1.9	-	6.1	6.3	(0.2)	8.0	8.2	(0.2)
Operating grants and contributions	0.7	1.4	(0.7)	-	-	-	0.7	1.4	(0.7)
Capital grants and contributions	5.0	2.0	3.0	-	-	-	5.0	2.0	3.0
Total Program Revenues	7.6	5.3	2.3	6.1	6.3	(0.2)	13.7	11.6	2.1
General revenues:									
Taxes:									
General property taxes	2.5	2.6	(0.1)	-	-	-	2.5	2.6	(0.1)
Sales tax	5.2	5.3	(0.1)	-	-	-	5.2	5.3	(0.1)
Franchise tax	0.9	1.0	(0.1)	-	-	-	0.9	1.0	(0.1)
Investment earnings	0.5	0.3	0.2	0.1	0.2	(0.1)	0.6	0.5	0.1
Other	2.3	2.3	-	-	-	-	2.3	2.3	0.0
Transfers	0.7	0.7	-	(0.7)	(0.7)	-	-	-	-
Total general revenues	12.1	12.2	(0.1)	(0.5)	(0.5)	(0.1)	11.5	11.7	(0.2)
Total Revenues	19.6	17.5	2.2	5.6	5.8	(0.3)	25.2	23.3	1.9
Expenses:									
General government	1.5	0.9	0.6	-	-	-	1.5	0.9	0.6
Public safety	9.9	8.9	1.0	-	-	-	9.9	8.9	1.0
Public works	5.0	3.9	1.1	-	-	-	5.0	3.9	1.1
Community development	0.9	1.3	(0.4)	-	-	-	0.9	1.3	(0.4)
Sanitation	-	-	-	4.7	5.2	(0.5)	4.7	5.2	(0.5)
Interest on long-term debt	-	-	-	-	-	-	-	-	-
Total Expenses	17.3	15.0	2.3	4.7	5.2	(0.5)	22.0	20.2	1.8
Increase (decrease) in net position	2.3	2.5	(0.2)	0.9	0.6	0.3	3.2	3.1	0.1
Net position- beginning (as restated)	53.9	54.7	(0.8)	21.1	20.5	0.6	74.9	75.2	(0.3)
Net Position Ending	56.2	57.2	(1.0)	21.9	21.1	0.8	78.2	78.3	(0.1)

The governmental activities decreased the City's net position by $1.0 million. Governmental program revenues offset 44 percent of program expenditures, a 9% increase when compared with prior year. General revenues and transfers of $12.1 million did not meet total expenditures. There was a 1.8 percent decrease to governmental activities net position.

The business-type activities increased the City's net position by $0.8 million. Business-type program revenues exceeded expenditures, resulting in a 3.8 percent increase to business-type net position. This is the tenth year that the Lemon Grove Sanitation District has had staff to maintain the sewers, thus allowing for more control over expenditures and an enhanced ability to grow assets for future needs.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. City funds are divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Unlike the government-wide financial statements, the fund financial statements focus on *near-term inflows and outflows of spendable resources*, as well as on *balances of spendable resources* available at the end of the fiscal year, and offer summary information for each major fund. Such information may be useful in evaluating a government's near-term financing requirements. In particular, *unassigned fund balance* serves as a useful measure of a government's net resources available for spending at fiscal year-end.

Governmental Funds: *Governmental funds* are used to account for the functions reported as *governmental activities* in the government-wide financial statements.

As of June 30, 2017, the City's governmental funds reported a combined ending fund balance of $13.6 million. The unassigned fund balance, which represents the amount that is available for spending at the City's discretion, is currently at $4.5 million. The remainder of fund balance is restricted to indicate that it is not available for new spending because it has been committed to a variety of restricted purposes including low and moderate housing and debt service.

The City maintains nineteen individual governmental funds. Information is presented separately in the governmental fund balance sheet and in the governmental fund statement of revenues, expenditures and changes in fund balances for the major funds – General, and Housing Fund. Data from the other seventeen governmental funds are combined into a single, aggregated presentation entitled Nonmajor Governmental Funds. Individual fund data for each of these nonmajor governmental funds is provided in the supplementary information section of this report.

The General Fund is the chief operating fund of the City. At June 30, 2017, the total fund balance was $5.3 million, of which $5.3 million is considered unassigned fund balance and therefore available for discretionary use. The remaining fund balance is made up of non-spendable fund balance of $0.02 million and no restricted fund balances.

Proprietary Funds: The City maintains two types of proprietary funds; an enterprise fund to account for the Lemon Grove Sanitation District and an internal service fund to account for the City's self-insurance - function.

There is no restricted net position for these funds, and the changes in net position show a growth over last year for Sanitation of 3.8 percent and a decrease of the Internal Service fund of 34.65 percent.

Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. Below are three notes of particular interest.

Note 2 – Cash and Investments: The City's total cash and investments at the end of the fiscal year totaled $29.7 million. Approximately $21.8 million was invested with the Local Agency Investment Fund. Approximately $1.8 million was held and invested by bond trustees, and the balance was deposited in the City's checking accounts.

Note 5 – Capital Assets: Capital assets for the City's governmental activities were valued at $43.8 million, net of accumulated depreciation. Capital assets for the City's business-type activities were valued at $6.6 million. This investment in capital assets includes land, buildings, construction in progress, equipment, vehicles, and infrastructure.

Note 6 – Long-Term Liabilities: The City had a total long-term debt outstanding of $9.0 million. The majority of this amount, $6.7 million is comprised of net pension liability. The City's total long-term debt increased by $1.4 million from the prior year.

Required Supplementary Information

The required supplementary information is comprised of budgetary comparisons for the General Fund and the Housing Fund.

The City adopts an annual budget for its General Fund and all other funds. A comparison between budget and actual is incorporated in the financial report to demonstrate compliance with the budget. The original budget was adopted in June 2016.

The General Fund Budgetary Comparison Schedule shows that, for this fiscal year, the General Fund experienced a gain of expected revenues and transfers of $852,421, while the expenditures were under what was expected by $160,693. The actual revenues and expenditures resulted in a net deficit of $175,366. The difference between expected deficit and actual is $1.0 million.

REQUESTS FOR INFORMATION

The Annual Financial Report is designed to provide a general view of the City's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Finance Director at the City of Lemon Grove, 3232 Main Street, Lemon Grove, CA 91945, (619) 825-3800, or aburrell@lemongrove.ca.gov.

BASIC FINANCIAL STATEMENTS

City of Lemon Grove
Statement of Net Position
June 30, 2017

	Governmental Activities	Business-type Activities	Totals
ASSETS			
Cash and Investments	$ 8,623,027	$ 16,812,448	$ 25,435,475
Receivables:			
Accounts	3,495,245	63,470	3,558,715
Interest	1,592,018	-	1,592,018
Notes and Loans Receivable	6,693,062	-	6,693,062
Prepaid Items	8,578	258	8,836
Internal Balances	-	-	-
Cash and Investments with Fiscal Agent	28,202	-	28,202
Capital Assets, Not Being Depreciated	10,851,403	1,342,651	12,194,054
Capital Assets, Net of Accumulated Depreciation	32,929,273	5,247,178	38,176,451
Total Assets	64,220,808	23,466,005	87,686,813
DEFERRED OUTFLOWS OF RESOURCES			
Pension Related Amounts	3,624,882	953,228	4,578,110
LIABILITIES			
Accounts Payable	2,746,902	55,951	2,802,853
Accrued Liabilities	202,802	41,266	244,068
Deposits Payable	211,064	-	211,064
Noncurrent Liabilities:			
Due Within One Year	373,198	24,861	398,059
Due in More Than One Year	6,740,422	1,865,746	8,606,168
Total Liabilities	10,274,388	1,987,824	12,262,212
DEFERRED INFLOWS OF RESOURCES			
Pension Related Amounts	1,354,369	489,786	1,844,155
NET POSITION			
Net Investment in Capital Assets	43,454,713	6,589,829	50,044,542
Restricted for:			
Transportation	794,774	-	794,774
Community Development	91,037	-	91,037
Public Safety	623,475	-	623,475
Housing	8,877,451	-	8,877,451
Public-access Television	243,385	-	243,385
Unrestricted	2,132,098	15,351,794	17,483,892
Total Net Position	$ 56,216,933	$ 21,941,623	$ 78,158,556

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Activities
Year Ended June 30, 2017

Functions/Programs	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions
Governmental Activities:				
General Government	$ 1,543,159	419,353	$ 6,485	$ -
Public Safety	9,884,392	744,377	166,846	-
Public Works	4,990,867	109,556	489,013	4,991,543
Community Development	882,340	583,702	50,243	-
Total Governmental Activities	17,300,758	1,856,988	712,587	4,991,543
Business-type Activities:				
Sanitation	4,690,722	6,121,851	-	-
Total Business-type Activities	4,690,722	6,121,851	-	-
Total Primary Government	$ 21,991,480	$ 7,978,839	$ 712,587	$ 4,991,543
General Revenues:				
Taxes:				
Property Taxes				
Sales Taxes				
Transient Occupancy Taxes				
Franchise Taxes				
Motor Vehicle in Lieu Taxes (Unrestricted)				
Investment Earnings				
Miscellaneous				
Transfers				
Total General Revenues and Transfers				
Change in Net Position				
Net Position, Beginning (Restated)				
Net Position, Ending				

The accompanying notes are an integral part of this statement.

Net (Expense) Revenue and Changes in Net Position		
Governmental Activites	Business-type Activities	Totals
$ (1,117,321)	$ -	$ (1,117,321)
(8,973,169)	-	(8,973,169)
599,245	-	599,245
(248,395)	-	(248,395)
(9,739,640)	-	(9,739,640)
-	1,431,129	1,431,129
-	1,431,129	1,431,129
(9,739,640)	1,431,129	(8,308,511)
2,454,561	-	2,454,561
5,176,561	-	5,176,561
52,043	-	52,043
938,714	-	938,714
2,272,050	-	2,272,050
28,321	103,386	131,707
497,209	-	497,209
652,400	(652,400)	-
12,071,859	(549,014)	11,522,845
2,332,219	882,115	3,214,334
53,884,714	21,059,508	74,944,222
$ 56,216,933	$ 21,941,623	$ 78,158,556

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Balance Sheet
Governmental Funds
June 30, 2017

	General Fund	Special Revenue: Housing Fund	Special Revenue: Transnet	Total Non-major Governmental Funds	Totals
ASSETS					
Cash and Investments	$ 4,919,383	$ 607,718	$ -	$ 1,940,097	$ 7,467,198
Accounts Receivable	1,114,152	49,975	2,007,090	322,163	3,493,380
Interest Receivable	-	1,592,018	-	-	1,592,018
Notes and Loans	-	6,693,062	-	-	6,693,062
Due from Other Funds	936,434	-	-	-	936,434
Prepaid Items	8,578	-	-	-	8,578
Due from Successor Agency	-	-	-	-	-
Cash with Fiscal Agents	3,499	-	-	-	3,499
Total Assets	$ 6,982,046	$ 8,942,773	$ 2,007,090	$ 2,262,260	$ 20,194,169
LIABILITIES					
Accounts Payable	$ 1,323,287	$ 65,322	$ 1,291,107	$ 63,207	$ 2,742,923
Accrued Liabilities	170,583	-	3,490	28,729	202,802
Due to Other Funds	-	-	770,653	165,781	936,434
Deposits Payable	149,561	-	-	61,503	211,064
Total Liabilities	1,643,431	65,322	2,065,250	319,220	4,093,223
DEFERRED INFLOWS					
Unavailable Revenue	41,497	1,641,993	670,136	127,770	2,481,396
Total Deferred Inflows	41,497	1,641,993	670,136	127,770	2,481,396
FUND BALANCES					
Nonspendable	8,578	-	-	-	8,578
Restricted	-	7,235,458	-	1,876,454	9,111,912
Committed	-	-	-	-	-
Assigned	-	-	-	-	-
Unassigned	5,288,540	-	(728,296)	(61,184)	4,499,060
Total Fund Balances (Deficits)	5,297,118	7,235,458	(728,296)	1,815,270	13,619,550
Total Liabilities, Deferred Inflows and Fund Balances	$ 6,982,046	$ 8,942,773	$ 2,007,090	$ 2,262,260	$ 20,194,169

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Reconciliation of the Balance Sheet of Governmental Funds
to the Statement of Net Position
June 30, 2017

Fund Balances of Governmental Funds		$ 13,619,550
Amounts reported for Governmental Activities in the Statement of Net Position are different because:		
Capital assets used in Governmental Activities are not financial resources and, therefore, are not reported in the funds.		
Capital Assets	$ 82,155,452	
Accumulated Depreciation	(38,374,776)	43,780,676
In governmental funds, other long-term assets are not available to pay for current period expenditures and, therefore, are reported as unavailable revenue in the funds.		2,481,396
Internal service funds are used by management to charge the cost of risk management to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net position.		684,255
Long-term liabilities are not due and payable in the current period and therefore are not reported in the funds.		
Capital Lease Payable		(325,963)
Compensated Absences		(815,748)
Net OPEB Obligation		(417,695)
Net Pension Liability		(5,060,051)
Amounts for deferred inflows and deferred outflows related to the City's Net Pension Liability are not reported in the funds.		
Deferred Outflows - Pension Related Amounts		3,624,882
Deferred Inflows - Pension Related Amounts		(1,354,369)
Net Position of Governmental Activities		$ 56,216,933

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Revenues, Expenditures, and Changes in Fund Balances
Governmental Funds
Year Ended June 30, 2017

	General Fund	Special Revenue: Housing Fund	Special Revenue: Transnet	Total Non-major Governmental Funds	Totals
REVENUES					
Taxes and Special Assessments	$ 10,882,008	$ -	$ -	$ 320,084	$ 11,202,092
Licenses and Permits	464,877	-	-	-	464,877
Fines, Forfeitures and Penalties	229,624	-	-	-	229,624
Intergovernmental Revenues	32,368	1,486,326	2,007,654	2,001,117	5,527,465
Charges for Services	440,756	-	-	187,576	628,332
Use of Money and Property	280,599	-	-	10,185	290,784
Other Revenues	497,209	-	-	6,944	504,153
Total Revenues	12,827,441	1,486,326	2,007,654	2,525,906	18,847,327
EXPENDITURES					
Current:					
General Government	1,025,265	-	76,528	70,675	1,172,468
Public Safety	9,710,139	-	-	24,178	9,734,317
Public Works	1,419,603	-	-	1,495,339	2,914,942
Community Development	566,562	-	-	183,614	750,176
Capital Outlay	194,550	1,337,304	2,357,785	263,305	4,152,944
Debt Service:					
Principal	76,545	-	-	-	76,545
Interest	10,143	-	-	-	10,143
Total Expenditures	13,002,807	1,337,304	2,434,313	2,037,111	18,811,535
Excess (Deficiency) of Revenues Over Expenditures	(175,366)	149,022	(426,659)	488,795	35,792
OTHER FINANCING SOURCES (USES)					
Transfers In	685,400	-	-	326,463	1,011,863
Transfers Out	(225,684)	-	-	(133,779)	(359,463)
Total Other Financing Sources (Uses)	459,716	-		192,684	652,400
Net Change in Fund Balances	284,350	149,022	(426,659)	681,479	688,192
Fund Balances, Beginning (Restated)	5,012,768	7,086,436	(301,637)	1,133,791	12,931,358
Fund Balances, Ending	$ 5,297,118	$ 7,235,458	$ (728,296)	$ 1,815,270	$ 13,619,550

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances
of Governmental Funds to the Statement of Activities
Year Ended June 30, 2017

Net Change in Fund Balances - Total Governmental Funds		$ 688,192
Amounts reported for Governmental Activities in the Statement of Activities are different because:		
Governmental funds report capital outlay as expenditures. However, in the statement of activities, the cost of these assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlay exceeded depreciation expense in the current year.		
Capital outlay	$ 3,529,999	
Depreciation expense	(1,779,351)	1,750,648
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.		133,250
The amounts below included in the statement of activities do not provide or require the use of current financial resources and, therefore, are not reported as revenues or expenditures in governmental funds (net change):		
Capital Lease		76,545
Compensated Absences		(68,449)
OPEB Liability		(40,814)
Net Pension Liability		95,284
Claims Payable		-
Loss on Disposal of Capital Assets		(15,640)
Amounts for deferred inflows and deferred outflows related to the City's Net Pension Liability are not reported in the funds. This is the net change in deferred inflows and outflows related to the net pension liability.		
Deferred Outflows - Pension Related Amounts		657,038
Deferred Inflows - Pension Related Amounts		(581,047)
Internal service funds are used by management to charge the cost of certain activities, such as risk management, to individual funds. The net revenue (expense) of the internal service funds is recorded with governmental activities.		(362,788)
Change in Net Position of Governmental Activities		$ 2,332,219

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Net Position
Proprietary Funds
June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
ASSETS		
Current Assets:		
Cash and Investments	$ 16,812,448	$ 1,155,829
Accounts Receivable	63,470	1,865
Prepaids	258	-
Total Current Assets	16,876,176	1,157,694
Noncurrent Assets:		
Cash and Investments with Fiscal Agent	-	24,703
Capital Assets, Not being depreciated	1,342,651	-
Capital Assets, Net of Accumulated Depreciation	5,247,178	-
Total Noncurrent Assets	6,589,829	24,703
Total Assets	23,466,005	1,182,397
DEFERRED OUTFLOWS OF RESOURCES		
Pension Actuarial Amounts	953,228	-
Total Deferred Outflows of Resources	953,228	-
LIABILITIES		
Current Liabilities:		
Accounts Payable	55,951	3,979
Accrued Liabilities	41,266	-
Compensated Absences	24,861	-
Claims Payable	-	-
Total Current Liabilities	122,078	3,979
Noncurrent Liabilities:		
Compensated Absences, Noncurrent	58,009	-
Claims Payable, Noncurrent	195,232	494,163
Net Pension Liability	1,612,505	-
Total Noncurrent Liabilities	1,865,746	494,163
Total Liabilities	1,987,824	498,142
DEFERRED INFLOWS OF RESOURCES		
Pension Actuarial Amounts	489,786	-
Total Deferred Inflows of Resources	489,786	-
NET POSITION		
Net Investment in Capital Assets	6,589,829	-
Unrestricted	15,351,794	684,255
Total Net Position	$ 21,941,623	$ 684,255

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Funds
Year Ended June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
OPERATING REVENUES		
Charges for Sales and Services	$ 6,101,903	$ -
Other Revenues	19,948	84,142
Total Operating Revenue	6,121,851	84,142
OPERATING EXPENSES		
Personnel Costs	1,249,384	-
Contractual Services	288,274	14,578
Materials and Supplies	75,478	-
Repairs and Maintenance	69,669	-
Dump Fees	2,648,020	-
Utilities	5,360	-
Insurance and Claims	153,999	439,102
Depreciation	200,538	-
Total Operating Expenses	4,690,722	453,680
Operating Income (Loss)	1,431,129	(369,538)
NONOPERATING REVENUES (EXPENSES)		
Interest Income	103,386	6,750
Total Nonoperating Revenues (Expenses)	103,386	6,750
Income (Loss) Before Transfers and Capital Contributions	1,534,515	(362,788)
Transfers Out	(652,400)	-
Total Transfers	(652,400)	-
Change in Net Position	882,115	(362,788)
Net Position - Beginning of Year (Restated)	21,059,508	1,047,043
Net Position - End of Year	$ 21,941,623	$ 684,255

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Cash Flows
Proprietary Funds
Year Ended June 30, 2017

	Business-type Activities Sanitation Fund	Governmental Activities Internal Service Fund
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from Customers and Users	$ 6,132,062	$ 88,349
Payments to Suppliers for Goods and Services	(3,104,380)	(49,479)
Payments to Employees for Services	(1,119,823)	-
Net Cash Provided (Used) by Operating Activities	1,907,859	38,870
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Cash Transferred to Other Funds	(652,400)	-
Net Cash Provided (Used) by Noncapital Financing Activities	(652,400)	-
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and Construction of Capital Assets	(1,082,337)	-
Capital Grants	-	-
Net Cash Provided (Used) by Capital and Related Financing Activities	(1,082,337)	-
CASH FLOWS FROM INVESTING ACTIVITIES		
Investment Income Received	103,386	6,750
Net Cash Provided (Used) by Investing Activities	103,386	6,750
Net Increase (Decrease) in Cash and Cash Equivalents	276,508	45,620
Cash and Cash Equivalents - Beginning of the Year	16,535,940	1,134,912
Cash and Cash Equivalents - End of the Year	$ 16,812,448	$ 1,180,532
RECONCILIATION OF CASH AND CASH EQUIVALENTS		
Cash and Investments	$ 16,812,448	$ 1,155,829
Restricted Cash and Investments	-	24,703
Total Cash and Cash Equivalents	$ 16,812,448	$ 1,180,532
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	$ 1,431,129	$ (369,538)
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation	200,538	-
(Increase) Decrease in Accounts Receivable	10,211	4,207
(Increase) Decrease in Prepaids	4,334	-
(Increase) Decrease in Deferred Outflows - Pension Actuarial	18,302	-
Increase (Decrease) in Accounts Payable and Accrued Liabilities	31,700	3,979
Increase (Decrease) in Net Pension Liability	(259,197)	-
Increase (Decrease) in Deferred Inflows - Pension Actuarial	350,005	-
Increase (Decrease) in Claims Payable	100,386	400,222
Increase (Decrease) in Compensated Absences Payable	20,451	-
Net Cash Provided by Operating Activities	$ 1,907,859	$ 38,870

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Net Position
Fiduciary Funds
June 30, 2017

	Successor Agency Private-purpose Trust Fund
ASSETS	
Cash and Investments	$ 2,366,405
Cash and Investments with Fiscal Agent	1,826,314
Accounts Receivable	2,770
Interest Receivable	862,955
Notes Receivable	3,200,230
Property Held for Resale	6,535,362
Total Assets	14,794,036
DEFERRED OUTFLOWS OF RESOURCES	
Deferred Loss on Refunding	293,386
Total Deferred Outflows of Resources	293,386
LIABILITIES	
Interest Payable	438,372
Accounts Payable	-
Due to the City of Lemon Grove	3,719,687
Bonds Payable, Short-term Portion	710,000
Bonds Payable, Long-term Portion	23,095,000
Total Liabilities	27,963,059
NET POSITION	
Net Position Held in Trust for Successor Agency	$ (12,875,637)

The accompanying notes are an integral part of this statement.

City of Lemon Grove
Statement of Changes in Net Position
Fiduciary Funds
Year Ended June 30, 2017

	Successor Agency Private-purpose Trust Fund
ADDITIONS	
Property Taxes	$ 2,229,896
Interest Revenue	114,708
Total Additions	2,344,604
DEDUCTIONS	
Administration	2,420
Project Costs	95,595
Interest Expense	1,120,363
Total Deductions	1,218,378
Change in Net Position	1,126,226
Net Position - Beginning of Year (Restated)	(14,001,863)
Net Position - End of Year	$ (12,875,637)

The accompanying notes are an integral part of this statement.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The basic financial statements of the City of Lemon Grove, California (City) have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to governmental agencies. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the City's accounting policies are described below.

A. Financial Reporting Entity

The City of Lemon Grove was incorporated in 1977, under the laws of the State of California.

The accompanying basic financial statements present the financial activities of the City and its component units, entities for which the City is considered to be financially accountable. Blended component units, although legally separate entities are, in substance, part of the City's operations and data from these units are combined with data of the City. The City had no discretely presented component units. The blended component units have a June 30 year end. The following entities are reported as blended component units:

The Lemon Grove Sanitation District (Sanitation District) was established on June 10, 1982 as part of an annexation/detachment change of organization. The Sanitation District provides sewer services within the City of Lemon Grove. The City Council acts as the Sanitation District's governing board and exerts significant influence over its operations.

The Lemon Grove Landscape and Lighting District (Landscape and Lighting District) was established on May 1, 1978 to provide for establishing various street lighting improvements and maintenance for property within the City of Lemon Grove. The City Council acts as the Landscape and Lighting District's governing board and exerts significant influence over its operations.

Separate financial statements for the Sanitation District and Landscape and Lighting District are not available.

B. Basis of Accounting and Measurement Focus

The accounts of the City are organized on the basis of funds, each of which is considered a separate accounting entity with its own self-balancing set of accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures or expenses. These funds are established for the purpose of carrying out specific activities or certain objectives in accordance with specific regulations, restrictions or limitations. Governmental resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled.

Government-Wide Financial Statements

The City's Government-Wide Financial Statements include a Statement of Net Position and a Statement of Activities. These statements present summaries of Governmental and Business-Type Activities for the City accompanied by a total column. These financial statements are presented on an "economic resources" measurement focus and the accrual basis of accounting. Accordingly, all of the City's assets and liabilities, including capital assets, as well as infrastructure assets, and long-term liabilities, are included in the accompanying Statement of Net Position. The Statement of Activities presents changes in net position. Under the accrual basis of accounting, revenues are recognized in the period in which they are earned while expenses are recognized in the period in which the liabilities are incurred.

Certain types of transactions reported as program revenues for the City are reported in three categories:

- Charges for services
- Operating grants and contributions
- Capital grants and contributions

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

Certain eliminations have been made regarding interfund activities, payables, and receivables. All internal balances in the Statement of Net Position have been eliminated except those representing balances between the governmental activities and the business-type activities, which are presented as internal balances and eliminated in the total primary government column. In the Statement of Activities, internal fund transactions have been eliminated; however, those transactions between governmental and business-type activities have not been eliminated. The following interfund activities have been eliminated:

- Due to/from other funds
- Transfers in/out

The City applies all applicable GASB pronouncements including all NCGA Statements and Interpretations currently in effect.

Governmental Fund Financial Statements

Governmental fund financial statements include a Balance Sheet and a Statement of Revenues, Expenditures and Changes in Fund Balances for all major governmental funds and non-major funds aggregated. An accompanying schedule is presented to reconcile and explain the differences in net position as presented in these statements to the net position presented in the government-wide financial statements. The City has presented all major funds that meet specific qualifications.

All governmental funds are accounted for on a spending or "current financial resources" measurement focus and the modified accrual basis of accounting. Accordingly, only current assets and current liabilities are included on the balance sheet. The Statement of Revenues, Expenditures and Changes in Fund Balances presents increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Under the modified accrual basis of accounting, revenues are recognized in the accounting period in which they become both measurable and available to finance expenditures of the current period. Revenues are considered to be *available* when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due.

The primary revenue sources that have been treated as susceptible to accrual by the City are property taxes, taxpayer-assessed tax revenues (sales taxes, transient occupancy taxes, franchise taxes, etc.), grant revenues and earnings on investments. Expenditures are recorded in the accounting period in which the related fund liability is incurred.

The City reports the following funds as major governmental funds of the City.

General Fund accounts for resources traditionally associated with governmental activities that are not required legally or by sound financial management to be accounted for in another fund.

Housing Fund accounts for the housing assets transferred from the former Redevelopment Agency, and the revenues and expenditures for the project area related to low- and moderate-income housing.

Transnet Fund accounts for Transnet allocation and street related projects eligible for Transnet funding. This fund is specifically used to finance significant right-of-way improvements (streets and sidewalks), storm drain, and traffic related projects.

Proprietary Fund Financial Statements

Proprietary fund financial statements include a Statement of Net Position, a Statement of Revenues, Expenses and Change in Net Position, and a Statement of Cash Flows for all proprietary funds. A column representing internal service funds is also presented in these statements. However, internal service balances and activities have been combined with the governmental activities in the Government-wide Financial Statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Proprietary funds are accounted for using the "economic resources" measurement focus and the accrual basis of accounting. Accordingly, all assets and liabilities (whether current or noncurrent) are included on the Statement of Net Position. The Statement of Revenues, Expenses and Changes in Fund Net Position presents increases (revenues) and decreases (expenses) in net position. Under the accrual basis of accounting, revenues are recognized in the period in which they are earned while expenses are recognized in the period in which a liability is incurred.

Operating revenues in the proprietary funds are those revenues that are generated from the primary operations of the fund. All other revenues are reported as non-operating revenues. Operating expenses are those expenses that are essential to the primary operations of the fund. All other expenses are reported as non-operating expenses.

The City reports the Sanitation Enterprise Fund and Self Insurance Internal Service Funds as proprietary funds of the City.

Sanitation Enterprise Fund accounts for the operation and maintenance of the wastewater system within the City's boundaries.

Internal service fund balances and activities have been combined with governmental activities in the Government-wide Financial Statements, and are comprised of the following funds:

Self Insurance Internal Service Fund accounts for all financial transactions related to the City's self insurance program. The service is provided to other City or agencies of the City on a cost reimbursement basis.

Fiduciary Fund Financial Statements

Fiduciary fund financial statements consist of a Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position. The City has two types of fiduciary funds, agency funds (as applicable) and a private-purpose trust fund. Agency funds are used to account for the assets held for distribution by the City as an agent for another entity for which the City has custodial responsibility and accounts for the flow of assets. Private-purpose trust funds account for resources of all other trust arrangements in which principal and income benefit individuals, private organizations, or other governments (i.e. unclaimed property/escheat property). Fiduciary funds are accounted for using the accrual basis of accounting.

The City reports the following fiduciary funds:

Successor Agency to the Lemon Grove Community Development Agency Private Purpose Trust Fund – accounts for the balances and activities relating to the dissolution of the former Community Development Agency (Agency), except those accounted for in the Housing Special Revenue Fund of the City.

C. Cash, Cash Equivalents, and Investments

The City pools cash resources from all funds in order to facilitate the management of cash. The balance in the pooled cash account is available to meet current operating requirements. Cash in excess of current requirements is invested in various interest-bearing accounts and other investments with varying terms.

In accordance with GASB Statement No. 40, *Deposit and Investment Disclosures*, certain disclosure requirements for Deposits and Investment Risks were made in the following areas:

- Interest Rate Risk
- Credit Risk
  - Overall
  - Custodial Credit Risk
  - Concentrations of Credit Risk

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

In addition, other disclosures are specified including use of certain methods to present deposits and investments, highly sensitive investments, credit quality at year-end, and other disclosures. In accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, highly liquid market investments with maturities of one year or less at time of purchase are stated at amortized cost. All other investments are stated at fair value. Market value is used as fair value for those securities for which market quotations are readily available.

The City participates in an investment pool managed by the State of California entitled Local Agency Investment Fund (LAIF) which has invested a portion of the pooled funds in Structured Notes and Asset-Backed Securities. LAIF's investments are subject to credit risk with the full faith and credit of the State of California collateralizing these investments. In addition, these Structured Notes and Asset-Backed Securities are subject to market risk as to the change in interest rates.

Cash equivalents are considered amounts in demand deposits and short-term investments with a maturity date within three months of the date acquired by the City and are presented as "Cash and Investments" in the accompanying Basic Financial Statements.

For purposes of the statement of cash flows, cash equivalents are defined as investments with original maturities of 90 days or less, which are readily convertible to known amounts of cash. The City considers all pooled cash and investments (consisting of cash and investments and restricted cash and investments) held by the City as cash and cash equivalents because the pool is used essentially as a demand deposit account from the standpoint of the funds. The City also considers all non-pooled cash and investments (consisting of cash with fiscal agent and restricted cash and investments held by fiscal agent) as cash and cash equivalents because investments meet the criteria for cash equivalents defined above.

D. Restricted Cash and Investments

Certain restricted cash and investments are held by fiscal agents for the redemption of bonded debt and for acquisition and construction of capital projects.

E. Compensated Absences

Vacation pay is payable to employees at the time a vacation is taken or upon termination of employment. Normally, an employee cannot accrue more than two times their regular annual entitlement.

Sick leave is payable when an employee is unable to work because of illness. Unused sick leave at termination is lost, unless eligible for conversion to retirement credit as provided by the City contract with CalPERS. For safety employees, upon retirement or termination of employment, suppression employees shall be paid for all accrued unfrozen sick leave at the rate of one-half the accumulated time. Pay shall be based upon vested amounts at the employee's pay rate at the time the hours were earned. Upon retirement, employees have the option to apply sick leave time toward retirement credit. Upon retirement, employees shall have the option to apply sick leave toward retirement credit on an hour-for-hour basis. The General Fund is primarily responsible for the repayment of the governmental portion of compensated absences.

F. Property Taxes

Property taxes in the State of California are administered for all local agencies at the county level, and consist of secured, unsecured, and utility tax rolls, as follows:

Property Valuations are established by the Assessor of the County of San Diego for the secured and unsecured property tax rolls; the utility property tax rolls are valued by the State Board of Equalization. Under the provisions of Article XIIIA of the State Constitution (Proposition 13 adopted by the voters on June 6, 1978), properties are assessed at 100% of full value. From this base assessment, subsequent annual increases in valuation are limited to a maximum of 2%. However, increases to full value are allowed for property improvements or upon change in ownership. Personal property is excluded from these limitations, and is subject to annual reappraisal.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

Tax Levies are limited to 1% of full value which results in a tax rate of $1.00 per $100 assessed valuation, under the provisions of Proposition 13. Tax rates for voter-approved indebtedness are excluded from this limitation. The City's share of the $1.00 varies depending on the tax rate area and it ranges from $0.0730 to $0.125.

Tax Levy Dates are attached annually on January 1 preceding the fiscal year for which the taxes are levied. The fiscal year begins July 1 and ends June 30 of the following year. Taxes are levied on both real and unsecured personal property as it exists at that time. Liens against real estate, as well as the tax on personal property, are not relieved by subsequent renewal or change in ownership.

Tax Levy Apportionments: Due to the nature of the City-wide maximum levy, it is not possible to identify general purpose tax rates for specific entities. Under State legislation adopted subsequent to the passage of Proposition 13, apportionments to local agencies are made by the county auditor-controller based primarily on the ratio that each agency represented of the total City-wide levy for the three years prior to fiscal year 1979.

Property Tax Administration Fees: The State of California FY 1990-91 Budget Act authorized counties to collect an administration fee for collection and distribution of property taxes. Property taxes are recorded net of administration fees withheld during the fiscal year.

The following are significant dates relating to the City's property taxes:

Lien date	March 1
Levy date	June 30
Due date	November 1 and February 1
Collection dates	December 10 and April 10

G. Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, traffic lights and signals, street lights, and similar items), are reported in the applicable government-wide financial statements. Capital assets are defined by the City as assets with an initial, individual cost of $5,000 ($100,000 for infrastructure) or more and an estimated useful life in excess of one year. Such capital assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets received prior to the implementation of GASB 72 were recorded at fair value on the date of donation. Donated capital assets received subsequent to the implementation of GASB 72 are recorded at acquisition value as of the date received. The cost of normal maintenance and repairs that do not add to the value of the capital asset or materially extend capital asset lives are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets for business-type activities is included as part of the capitalized value of the assets constructed. No interest was capitalized during the fiscal year ended June 30, 2017.

Capital assets of the City are depreciated using the straight-line method over the following estimated useful lives:

Assets	Years
Structures and Improvements	40
Public Domain Infrastructure	50
System Infrastructure	30
Vehicles	3 to 15
Other Equipment and Furnishings	3 to 20
Computer Equipment	3 to 10

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

H. Interest Payable

In the Government-wide and Proprietary Funds Financial Statements, interest payable on long-term debt is recognized as the liability is incurred.

I. Unavailable and unearned revenue

Unearned revenue is reported for transactions for which revenue has not yet been earned. In the Fund Financial Statements, unavailable revenue is recorded when transactions have not met the revenue recognition criteria based on the modified accrual basis of accounting. The City records unavailable and unearned revenues for transactions for which revenues have not been earned, or for which funds are not available to meet current financial obligations. Typical transactions for which unearned and unavailable revenues are recorded are grants received but not yet earned or available.

J. Claims and Judgments

The short-term and long-term workers' compensation and general liability claims payable are reported in Internal Service Funds. The short-term liability which will be liquidated with current financial resources is the amount of settlement reached, but unpaid, related to claims and judgments entered.

K. Use of Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America, as prescribed by the GASB and American Institute of Certified Public Accountants (AICPA), requires management to make assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses/expenditures during the reporting period. Actual results could differ from those estimates.

L. Long-term Obligations

In the Government-wide Financial Statements and Proprietary Fund Financial Statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Initial-issue bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method. Bond issuance costs are expensed when bonds are issued.

In the fund financial statements, governmental fund types recognize bond premiums, discounts, and issuance costs during the period issued. The face amount of debt issued is reported as other financing sources. Premiums received are reported as other financing sources, while discounts are reported as other financing uses.

M. Net Position

In the Government-wide Financial Statements, net position is classified in the following categories:

Net Investment in Capital Assets – This category consists of capital assets, net of accumulated depreciation and reduced by outstanding debt that is attributed to the acquisition, construction, or improvement of the assets.

Restricted – This category is restricted by external creditors, grantors, contributors, or laws or regulations of governments.

Unrestricted – This category represents all other amounts that do not meet the definition of net investment in capital assets or restricted net position as defined above.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

N. Fund Balances

Non-spendable Fund Balances

These include amounts that cannot be spent because they are either (a) not in spendable form or (b) legally or contractually required to be maintained intact; e.g., the principal of an endowment fund. Examples of "not in spendable form" include inventory, prepaid amounts, property held for resale and other items not expected to be converted to cash. However, if the proceeds from the eventual sale or liquidation of the items would be considered restricted, committed or assigned (as defined further on) then these amounts would be classified as restricted, committed or assigned rather than non-spendable. A debt service reserve fund held by a trustee is an example of fund balance in non-spendable form that is classified as restricted instead of non-spendable since the reserve is eventually liquidated to make the final debt service principal payment.

Restricted Fund Balances

Restricted fund balances have externally enforceable limitations on use. The limitations on use can be imposed by creditors, grantors, or contributors as well as by constitutional provisions, City charter, enabling legislation, laws and government regulations.

Committed Fund Balances

Amounts that can only be used for specific purposes pursuant to constraints imposed by formal action (Ordinance) of the City Council are classified as committed fund balances.

Assigned Fund Balances

Fund balance amounts for which the City Council has expressed intent for use but not taken formal action to commit are reported as assigned under GASB 54.

Unassigned Fund Balance

The residual classification for the General Fund is unassigned fund balance. The General Fund is the only fund that may report a positive unassigned fund balance. Negative fund balance reported in Special Revenue Funds is classified as unassigned fund balance.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then followed by unrestricted resources in the following order: committed, assigned, and unassigned, as necessary.

O. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The City reports an unamortized deferred charge on refunding resulting from the difference in carrying value of refunded debt and its reacquisition price, and deferred employer pension contributions as deferred outflows of resources.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

The City reports two items in this category: unavailable revenues and amounts related to changes in the City's net pension liability that are deferred and amortized over a stated number of years. Unavailable revenues arise only under the modified accrual basis of accounting and, accordingly, are reported only in the governmental funds balance sheet. The governmental funds report unavailable revenue from grants, sales tax revenues, and other

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued

applicable revenues. These amounts are deferred and will be recognized as inflows of resources in the period that the amounts become available. The City also reports deferred inflows as a result of the City's implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions,* which qualify for reporting in this category.

P. Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the City of Lemon Grove's California Public Employees' Retirement System (CalPERS) plan (Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Q. New Accounting Pronouncements

The Governmental Accounting Standards Board has issued the following Statements, which may affect the City's financial reporting requirements in the future:

GASB 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.* This statement was issued to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions. This GASB Statement is required to be implemented in financial statements issued for the periods beginning after June 15, 2017. The City has not elected to early-implement this statement and has not determined its effect on the financial statements.

GASB 83, Certain Asset Retirement Obligations: This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

GASB 86, Certain Debt Extinguishment Issues: This Statement establishes reporting requirements for when a government places cash and other monetary assets acquired with only existing resources in an irrevocable trust to extinguish debt. In financial statements using the economic resources measurement focus, governments should recognize any difference between the reacquisition price (the amount required to be placed in the trust) and the net carrying amount of the debt defeased in substance using only existing resources as a separately identified gain or loss in the period of the defeasance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

GASB 87, Leases: This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

2. CASH AND INVESTMENTS

A. Summary of Cash and Investments

Cash and investments within the basic financial statements are reported as follows:

2. CASH AND INVESTMENTS – Continued

	Government-wide Statement of Net Position			
	Governmental Activities	Business-Type Activities	Fiduciary Funds	Total
Cash and Investments	$ 8,623,027	$ 16,812,448	$ 2,366,405	$ 27,801,880
Restricted Cash and Investments	28,202	-	1,826,314	1,854,516
Total Cash and Investments	$ 8,651,229	$ 16,812,448	$ 4,192,719	$ 29,656,396

Cash and investments as of June 30, 2017 consist of the following:

Cash on Hand	$ 1,700
Deposits with Financial Institutions	1,481,335
Deposits with Fiscal Agent	86,182
Total Cash on Hand and Deposits	1,569,217
Local Agency Investment Fund	21,783,966
Certificates of Deposit	4,476,899
Total Investments	26,260,865
Investments with Fiscal Agent:	
Money Market	42,935
U.S. Agency Securities	1,191,651
Corporate Issues	591,728
Total Fiscal Agent Investments	1,826,314
Total Cash and Investments	$ 29,656,396

A. Deposits

The carrying amount of the City's deposits was $1,567,517 at June 30, 2017. Bank balances before reconciling items amounted to $1,843,130 at June 30, 2017. The City has not waived the collateral requirements for cash deposits, which are fully insured up to $250,000 by the Federal Deposit Insurance Corporation. Amounts are collateralized with securities held by the pledging financial institution in the City's name.

The California Government Code (Code) requires California banks and savings and loan associations to secure the City's deposits by pledging securities as collateral. The Code states that collateral pledged in this manner shall have the effect of perfecting a security interest in such collateral superior to those of a general creditor. Thus, collateral for deposits is considered to be held in the City's name. The market value of pledged securities must equal at least 110% of the City's deposits. California law also allows institutions to secure City deposits by pledging first trust deed mortgage notes having a value of 150% of the City's total deposits.

The City follows the practice of pooling cash and investments of all funds, except for funds required to be held by fiscal agents under the provisions of bond indentures. Interest income earned on pooled cash and investments is allocated to the various funds based on the period-end cash and investment balances. Interest income from cash and investments with fiscal agents is credited directly to the related fund.

2. CASH AND INVESTMENTS – Continued

B. Investments Authorized by the California Government Code and the City's Investment Policy

The table below identifies the investment types that are authorized for the City of Lemon Grove by the California Government Code (or the City's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the City's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk. This table does not address investments of debt proceeds held by bond trustee that are governed by the provisions of debt agreements of the City, rather than the general provisions of the California Government Code or the City's investment policy.

Authorized Investment Type	Maximum Maturity	Maximum Percentage/Amount of Portfolio	Maximum Investment in One Issuer
Local Agency Investment Fund (State Pool)	N/A	None	None
Certificates of Deposits	5 Years	30%	None

C. Investments Authorized by Debt Agreements

Investments of debt proceeds held by trustees are governed by provisions of the debt agreements, rather than the general provisions of the California Government Code or the City's investment policy.

D. Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the City manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time, as necessary, to provide the cash flows and liquidity needed for operations.

Information about the sensitivity of the fair values of the City's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the City's investments by maturity:

		Remaining Maturity (in Months)		
Investment Type	Total	12 Months Or Less	13 to 24 Months	25 to 60 Months
Local Agency Investment Fund	$ 21,783,966	$ 21,783,966	$ -	$ -
Certificate of Deposits	4,476,899	738,558	987,075	2,751,266
Held by Fiscal Agents:				
US Bank Money Market	42,935	42,935	-	-
Federal Farm Credit Bank	602,294	602,294	-	-
Federal Home Loan Bank	589,357	589,357	-	-
Private Export Funding Corp.	591,728	-	-	591,728
	$ 28,087,179	$ 23,757,110	$ 987,075	$ 3,342,994

E. Investments with Fair Values Highly Sensitive to Interest Rate Fluctuations

The City's investments (including investments held by bond trustees) do not include any investments that are highly sensitive to interest rate fluctuations.

2. CASH AND INVESTMENTS – Continued

F. Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented on the following page is the minimum rating required by (where applicable) the California Government Code, the City's investment policy, or debt agreements, and the actual rating as of fiscal year end for each investment type.

Investment Type	Amount	Minimum Legal Rating	AA+	Aaa	Unrated
Local Agency Investment Fund	$ 21,783,966	N/A	$ -	$ -	$ 21,783,966
Cerficates of Deposits	4,476,899	N/A	-	-	4,476,899
Held by Fiscal Agents:					
US Bank Money Market	42,935	AAA	-	-	42,935
Federal Farm Credit Bank	602,294	N/A	602,294	-	-
Federal Home Loan Bank	589,357	N/A	589,357	-	-
Private Export Funding Corp.	591,728	A-1+	-	591,728	-
Total	$ 28,087,179		$ 1,191,651	$ 591,728	$ 26,303,800

G. Concentration of Credit Risk

The investment policy of the City contains no limitations on the amount that can be invested in any one issuer. The City has no investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represent 5% or more of total City investments by reporting unit (primary government, governmental activities, business type activities, fiduciary funds, major funds, non- major funds in the aggregate, etc.).

H. Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. None of the City's investments were subject to custodial credit risk.

I. External Investment Pools

The City is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The fair value of the City's investment in this pool is reported in the accompanying financial statements at amounts based upon the City's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio).

The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

2. CASH AND INVESTMENTS – Continued

J. Investment Valuation

Investments (except for money market accounts, time deposits, and commercial paper) are measured at fair value on a recurring basis. *Recurring* fair value measurements are those that Governmental Accounting Standards Board (GASB) Statements require or permit in the statement of net position at the end of each reporting period. Fair value measurements are categorized based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Restricted cash and investments included money market accounts and guaranteed investment contracts which are not subject to fair value measurement. The City has the following recurring fair value measurements as of June 30, 2017:

- Federal Agency Securities of $1,191,651 are valued using a matrix pricing model (Level 2 inputs)
- Certificates of Deposit of $4,476,899 are valued using a matrix pricing model (Level 2 inputs)
- Corporate Securities of $591,728 are valued using quoted market prices (Level 1 inputs)

The City's fair value for its investment in the State of California Local Agency Investment Fund (LAIF) is based on the fair market value factors provided by LAIF that are calculated based on the total fair market value of the pool. LAIF includes investments categorized as Level 1 such as United States Treasury securities, Federal Agency securities, and supranational debentures that are valued based on prices quoted in active markets, and investments categorized as Level 2, such as negotiable certificates of deposit and bank notes that are based on market corroborated pricing utilizing inputs such as yield curves and indices derived principally from, or corroborated by, observable market data by correlation to other means.

3. NOTES RECEIVABLE

Notes receivable as of June 30, 2017 totaled $9,893,292 and consisted of the following:

Hitzke Development Corporation

During the fiscal year ended June 30, 2009, the City entered into Owner Participation Agreements with Hitzke Development Corporation (Developer) for the development of several projects within the City's project area. In addition, the City entered into promissory notes with the Developer with amounts not-to-exceed (excluding accrued interest) $2,763,292 for Citronica One, $2,500,000 for Citronica Two, and $1,500,000 for Citronica Three, all at 3.0% interest and secured by a deed of trust for each note creating a valid lien upon the Developer's interest in the development parcels. The funds are being used to construct a 54-unit mixed-use affordable housing project. The notes call for funds to be advanced to the borrower for the purchase of several parcels to be used for the projects. In addition, the funds can be used for certain pre-development costs. During the fiscal year ended June 30, 2013, the City entered into another promissory note with the Developer in an amount not-to-exceed (excluding interest) $1,323,031for Citronica One. The notes are due and payable two (2) years from the date of the execution of the notes or rolled over as additional assistance into the development and disposition agreement. As of June 30, 2017, the City had advanced $4,263,292 and $2,500,000 (Citronica One and Two, respectively) to the borrower. In addition, $939,629 and $635,249 (Citronica One and Two, respectively) of cumulative interest was accrued.

Community Collective

The City issued a Note to Community Collective in an amount not-to-exceed $3,130,000 at 3.0% interest secured by a deed of trust, assignment of rents, a security agreement and fixture filing. Community Collective is using the funds to construct a mixed-use, multi-family residential housing project for extremely low, very low, and low-income persons. The Note calls for funds to be advanced to the borrower for costs related to the project as the costs are incurred by the borrower. The note is due and payable in full in fifty-five (55) years from the date of the note or upon sale or refinancing of the project. In the event there is surplus cash (as defined in the note), Community Collective shall pay the City one-half of the available surplus cash. As of June 30, 2017, the City had advanced $3,130,000 to the borrower. In addition, $880,094 of cumulative interest was incurred.

4. DUE FROM SUCCESSOR AGENCY

The General Fund previously advanced the former Lemon Grove Community Development Agency amounts to fund various redevelopment projects. The advances payable had no stated interest rate. During fiscal year 2012, following the dissolution of California redevelopment agencies, the payable was transferred from the former Agency to the Private-purpose Trust Fund - Successor Agency to the Lemon Grove Community Development Agency. The repayment of this amount is uncertain as of June 30, 2017, and is subject to approval by the State Department of Finance as an enforceable obligation of the Successor Agency under applicable redevelopment agency dissolution law. As of June 30, 2017, the amount due from the Successor Agency was $3,719,687, and is offset by an allowance for doubtful accounts.

5. CAPITAL ASSETS

A. Governmental Activities

Capital asset activity for governmental activities for the fiscal year ended June 30, 2017, was as follows:

Governmental Activities	Beginning of Year	Additions	Deletions	End of Year
Capital Assets, Not Being Depreciated:				
Land and Improvements	$ 7,520,853	$ -	$ -	$ 7,520,853
Construction in Progress	157,105	3,173,445	-	3,330,550
Total Capital Assets, Not Being Depreciated	7,677,958	3,173,445	-	10,851,403
Capital Assets, Being Depriciated:				
Buildings and Improvements	9,584,779	88,220	-	9,672,999
Vehicles and Equipment	2,643,824	44,550	(157,865)	2,530,509
Infrastructure	58,182,653	917,888	-	59,100,541
Total Capital Assets, Being Depreciated	70,411,256	1,050,658	(157,865)	71,304,049
Less Accumulated Depreciation:				
Buildings and Improvements	(6,303,193)	(249,098)	-	(6,552,291)
Vehicles and Equipment	(1,530,691)	(143,157)	142,225	(1,531,623)
Infrastructure	(28,903,766)	(1,387,096)	-	(30,290,862)
Total Accumulated Depreciation	(36,737,650)	(1,779,351)	142,225	(38,374,776)
Capital Assets Being Depreciated, Net	33,673,606	(728,693)	(15,640)	32,929,273
Total Capital Assets - Governmental Activities	$ 41,351,564	$ 2,444,752	$ (15,640)	$ 43,780,676

Depreciation expense by program for capital assets for the year ended June 30, 2017 was as follows:

General Government	$ 69,915
Public Safety	124,292
Public Works	1,452,980
Community Development	132,164
Total Depreciation	$ 1,779,351

5. CAPITAL ASSETS – Continued

B. Business-type Activities

Capital asset activity for business-type activities for the fiscal year ended June 30, 2017, was as follows:

Business-type Activities	Beginning of Year	Additions	Deletions	End of Year
Capital Assets, Not Being Depreciated:				
Land and Improvements	$ 3,724	$ -	$ -	$ 3,724
Construction in Progress	256,590	1,082,337	-	1,338,927
Total Capital Assets, Not Being Depreciated	260,314	1,082,337	-	1,342,651
Capital Assets, Being Depreciated:				
Machinery and Equipment	1,366,481	-	-	1,366,481
Infrastructure	12,174,611	-	-	12,174,611
Total Capital Assets, Being Depreciated	13,541,092	-	-	13,541,092
Less Accumulated Depreciation:				
Machinery and Equipment	(953,525)	(58,794)	-	(1,012,319)
Infrastructure	(7,139,851)	(141,744)	-	(7,281,595)
Total Accumulated Depreciation	(8,093,376)	(200,538)	-	(8,293,914)
Capital Assets Being Depreciated, Net	5,447,716	(200,538)	-	5,247,178
Total Capital Assets - Business-type Activities	$ 5,708,030	$ 881,799	$ -	$ 6,589,829

6. LONG-TERM DEBT

The following is a summary of changes in the City's long-term liabilities for the fiscal year ended June 30, 2017:

	Beginning Balance*	Additions	Reductions	Ending Balannce	Due Within One Year
Governmental Activities:					
Capital Lease Payable	$ 402,508	$ -	$ (76,545)	$ 325,963	$ 78,474
Compensated Absences	747,299	130,777	(62,328)	815,748	244,724
OPEB Liability	376,881	176,975	(136,161)	417,695	-
Net Pension Liability	5,155,335	-	(95,284)	5,060,051	-
Claims Payable	93,941	428,364	(28,142)	494,163	50,000
Total	$ 6,775,964	$ 736,116	$ (398,460)	$ 7,113,620	$ 373,198

* Includes prior period adjustments of $(62,419) for Compensated Absences, $402,508 for Capital Leases and $400,274 for Net Pension Liability.

For governmental activities, leases payable, compensated absences, the OPEB liability and the net pension liability are generally liquidated by the General Fund.

6. LONG-TERM DEBT – Continued

	Beginning Balance*	Additions	Reductions	Ending Balannce	Due Within One Year
Business-type Activities:					
Compensated Absences	$ 62,419	$ 20,451	$ -	$ 82,870	$ 24,861
Net Pension Liability	1,871,702	-	(259,197)	1,612,505	-
Claims Payable	94,846	100,386	-	195,232	-
Total	$ 2,028,967	$ 120,837	$ (259,197)	$ 1,890,607	$ 24,861

* Includes prior period adjustments of $62,419 for Compensated Absences.

Capital Lease Payable

In 2013, the City entered into a capital lease for the purchase of a pumper. The purchase price for the equipment was $550,000, with annual payments to be made on July 5 of each year, with the final payment on July 5, 2020. The payments include interest of approximately 2.5%. The following represents the future debt service requirements for this lease:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 78,474	$ 6,236	$ 84,710
2019	80,452	6,236	86,688
2020	82,479	4,209	86,688
2021	84,558	2,131	86,689
Total	$ 325,963	$ 18,812	$ 344,775

Fiduciary Fund Long-term Debt

A summary of the Successor Agency Fiduciary Fund long-term debt for the 2016-17 fiscal year is as follows:

	Beginning Balance*	Additions	Deletions	Ending Balance	Due Within One Year
Tax Allocation Bonds:					
Series 2007	$ 12,605,000	$ -	$ (205,000)	$ 12,400,000	$ 215,000
Series 2010, Refunding	6,245,000	-	(365,000)	5,880,000	380,000
Series 2014, Refunding	5,640,000	-	(115,000)	5,525,000	115,000
Total	$ 24,490,000	$ -	$ (685,000)	$ 23,805,000	$ 710,000

*includes a prior period adjustment of $58,758 for issuance discounts.

2007 Tax Allocation Bonds: In June 2007, the former Redevelopment Agency issued $13,830,000 of Tax Allocation Bonds with interest rates varying from 4.00% to 5.00% and payable semi-annually on February 1 and August 1 of each year. The bonds mature annually at various amounts through August 1, 2037. The bonds are payable from and secured by incremental tax revenues (Pledged Tax Revenues). The bonds were issued to finance redevelopment activities within or for the benefit of the Agency's project area, and to finance low- and moderate-income housing activities within the geographic boundaries of the City of Lemon Grove.

6. LONG-TERM DEBT – Continued

Future debt service requirements on the 2007 Tax Allocation Bonds are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 215,000	547,278	$ 762,278
2019	225,000	538,412	763,412
2020	230,000	529,084	759,084
2021	230,000	519,540	749,540
2022	240,000	509,668	749,668
2023	255,000	499,149	754,149
2024	260,000	488,010	748,010
2025	290,000	475,910	765,910
2026	300,000	462,930	762,930
2027	315,000	449,400	764,400
2028	330,000	435,210	765,210
2029	340,000	420,300	760,300
2030	360,000	404,550	764,550
2031	365,000	388,237	753,237
2032	385,000	371,363	756,363
2033	865,000	343,237	1,208,237
2034	1,085,000	299,363	1,384,363
2035	1,135,000	249,413	1,384,413
2036	1,585,000	188,212	1,773,212
2037	1,655,000	115,312	1,770,312
2038	1,735,000	39,037	1,774,037
Totals	$ 12,400,000	$ 8,273,615	$ 20,673,615

2010 Tax Allocation Refunding Bonds**:** During fiscal year 2011, the Agency issued $8,000,000 of Tax Allocation Bonds with interest rates varying from 1.75% to 5.25% and payable semi-annually on February 1 and August 1 of each year. The Bonds mature annually at various amounts through August 1, 2028. The bonds are payable from and secured by incremental tax revenues (Pledged Tax Revenues). The Bond proceeds were used to refund the former Agency's 1998 Tax Allocation Bonds. The scheduled annual minimum debt service requirements at June 30, 2017 are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 380,000	$ 280,068	$ 660,068
2019	395,000	265,043	660,043
2020	410,000	248,430	658,430
2021	425,000	230,155	655,155
2022	445,000	209,690	654,690
2023	470,000	186,685	656,685
2024	490,000	161,965	651,965
2025	520,000	135,957	655,957
2026	545,000	108,534	653,534
2027	570,000	79,537	649,537
2028	600,000	48,825	648,825
2029	630,000	16,538	646,538
Totals	$ 5,880,000	$ 1,971,427	$ 7,851,427

6. LONG-TERM DEBT – Continued

2014 Tax Allocation Refunding Bonds: In August 2014, the former Agency issued $5,740,000 of Tax Allocation Bonds with interest rates varying from 2.00% to 5.00% and payable semi-annually on February 1 and August 1 of each year. The bonds mature annually at various amounts through August 1, 2034. The Bond proceeds were used to refund previously outstanding Tax Allocation Bonds. The scheduled annual minimum debt service requirements at June 30, 2017 are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total
2018	$ 115,000	$ 211,874	$ 326,874
2019	120,000	208,636	328,636
2020	125,000	204,961	329,961
2021	130,000	201,136	331,136
2022	135,000	196,993	331,993
2023	135,000	192,605	327,605
2024	145,000	186,786	331,786
2025	140,000	179,661	319,661
2026	150,000	172,411	322,411
2027	165,000	165,877	330,877
2028	165,000	160,205	325,205
2029	170,000	154,215	324,215
2030	835,000	135,456	970,456
2031	875,000	102,300	977,300
2032	910,000	66,600	976,600
2033	505,000	38,300	543,300
2034	345,000	21,300	366,300
2035	360,000	7,200	367,200
Totals	$ 5,525,000	$ 2,606,516	$ 8,131,516

7. DEFINED BENEFIT PENSION PLAN

General Information about the Defined Benefit Pension Plan

Plan Descriptions – All qualified permanent and probationary employees are eligible to participate in the Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Plan) administered by the California Public Employees' Retirement System (CalPERS.) The Plan consists of individual rate plans (benefit tiers) within a safety risk pool and a miscellaneous risk pool. Plan assets may be used to pay benefits for any employer rate plan of the safety and miscellaneous pools. Accordingly, rate plans within the safety or miscellaneous pools are not separate plans under GASB Statement No. 68. Individual employers may sponsor more than one rate plan in the miscellaneous or safety risk pools. The City sponsors five rate plans (three miscellaneous and two safety). Benefit provisions under the Plan are established by State statute and City resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

Benefits Provided – The Plan is a cost-sharing multiple-employer defined benefit pension plan administered by the California Public Employees' Retirement System (CalPERS). A full description of the pension plan benefit provisions, assumptions for funding purposes but not accounting purposes, and membership information is listed in the June 30, 2015 Annual Actuarial Valuation Report. Details of the benefits provided can be obtained in Appendix B of the June 30, 2015 actuarial valuation report. This report is a publicly available valuation report that can be obtained at the CalPERS' website under Forms and Publications.

7. DEFINED BENEFIT PENSION PLAN – Continued

The rate plan provisions and benefits in effect at June 30, 2017, are summarized as follows:

	Miscellaneous	Miscellaneous Tier II	Miscellaneous PEPRA
Hire date	Prior to November 12, 2005	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	2.5% @ 55 single highest year	2% @ 60 36 month average	2% @ 62 36 month average
Benefit vesting schedule	5 years service	5 years service	5 years service
Benefit payments	monthly for life	monthly for life	monthly for life
Retirement age	50	50	52
Monthly benefits, as a % of eligible compensation	2% to 2.5%	1.092% to 2.418%	1% to 2.5%
Required employee contribution rates	8%	7%	6.5%
Required employer contribution rates	10.069% + $374,100	7.159%	6.555% + $11

	Safety	Safety PEPRA
Hire date	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	3% @ 55 single highest year	2.7% @ 57 36 month average
Benefit vesting schedule	5 years service	5 years service
Benefit payments	monthly for life	monthly for life
Retirement age	50	50
Monthly benefits, as a % of eligible compensation	2.4% to 3%	2% to 2.7%
Required employee contribution rates	9%	
Required employer contribution rates	17.689% + $112,537	12.082%

Contributions – Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. Funding contributions for the Plan are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

Beginning in fiscal year 2016, CalPERS collects employer contributions for the Plan as a percentage of payroll for the normal cost portion as noted in the rates above and as a dollar amount for contributions toward the unfunded liability. The dollar amounts are billed on a monthly basis. The City's required contribution for the unfunded liability was $486,648 in fiscal year 2017.

The City's contributions to the Plan for the year ended June 30, 2017 were $813,911.

7. DEFINED BENEFIT PENSION PLAN – Continued

Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions

As of June 30, 2017, the City reported a liability of $6,672,556 for its proportionate share of the net pension liability. The City's net pension liability for the Plan is measured as of June 30, 2016, and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2015 rolled forward to June 30, 2016 using standard update procedures. The City's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The City's proportionate share of the Plan's net pension liability as of June 30, 2015 and 2016 was as follows:

Proportion - June 30, 2015	0.102377%
Proportion - June 30, 2016	0.077112%
Change - Increase (Decrease)	-0.025265%

For the year ended June 30, 2017, the City recognized pension expense of $751,749. At June 30, 2017, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	$ 813,914	$ -
Differences between actual and expected experience	-	17,655
Changes in assumptions	-	308,726
Change in employer's proportion	491,495	1,517,774
Differences between the employer's contributions and the employer's proportionate share of contributions	1,706,066	-
Net differences between projected and actual earnings on plan investments	1,566,635	-
Total	$ 4,578,110	$ 1,844,155

The $813,914 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ending June 30,	
2018	$ 441,618
2019	380,116
2020	691,639
2021	406,668
2022	-
Thereafter	-

7. DEFINED BENEFIT PENSION PLAN – Continued

Actuarial Assumptions – The total pension liabilities in the June 30, 2015 actuarial valuations were determined using the following actuarial assumptions:

Valuation date	June 30, 2015
Measurement date	June 30, 2016
Actuarial cost method	entry-age normal
Actuarial assumptions:	
Discount rate	7.65%
Inflation	2.75%
Payroll growth	3.00%
Projected salary increase	(1)
Investment rate of return	7.65%
Mortality	(2)

(1) Depending on age, service and type of employment
(2) Derived using CalPERS' Membership Data for all Funds.

The underlying mortality assumptions and all other actuarial assumptions used in the June 30, 2015 valuation were based on the results of a January 2014 actuarial experience study for the period 1997 to 2011. Further details of the Experience Study can found on the CalPERS website.

Discount Rate – The discount rate used to measure the total pension liability was 7.65%. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on testing of the plans, the tests revealed the assets would not run out. Therefore, the current 7.65 percent discount rate is appropriate and the use of the municipal bond rate calculation is not necessary. The long term expected discount rate of 7.65 percent will be applied to all plans in the Public Employees Retirement Fund (PERF). The stress test results are presented in a detailed report called "GASB Crossover Testing Report" that can be obtained from the CalPERS' website under the GASB 68 section.

CalPERS is scheduled to review all actuarial assumptions as part of its regular Asset Liability Management (ALM) review cycle that is scheduled to be completed in February 2018. Any changes to the discount rate will require Board action and proper stakeholder outreach. For these reasons, CalPERS expects to continue using a discount rate net of administrative expenses for GASB 67 and 68 calculations through at least the 2017-18 fiscal year. CalPERS will continue to check the materiality of the difference in calculation until such time as they have changed their methodology.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating

7. DEFINED BENEFIT PENSION PLAN – Continued

the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These rates of return are net of administrative expenses.

Asset Class	New Strategic Allocation	Real Return Years 1 - 10 (1)	Real Return Years 11+ (2)
Global Equity	51%	5.25%	5.71%
Global Fixed Income	20%	0.99%	2.43%
Inflation Sensitive	6%	0.45%	3.36%
Private Equity	10%	6.83%	6.95%
Real Estate	10%	4.50%	5.13%
Infrastructure and Forestland	2%	4.50%	5.09%
Liquidity	1%	-0.55%	-1.05%

(1) An expected inflation of 2.5% used for this period.
(2) An expected inflation of 3.0% used for this period.

Sensitivity of the Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the City's proportionate share of the net pension liability for the Plan, calculated using the discount rate for the Plan, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

1% Decrease		6.65%
Net Pension Liability	$	10,582,438
Current Discount Rate		7.65%
Net Pension Liability	$	6,672,556
1% Increase		8.65%
Net Pension Liability	$	3,447,336

Pension Plan Fiduciary Net Position – Detailed information about the Plan's fiduciary net position is available in the separately issued CalPERS financial reports.

Payable to the Pension Plan

At June 30, 2017, the City reported no payables to the pension plan, for outstanding contributions required for the year ended June 30, 2017.

8. OTHER POST EMPLOYMENT BENEFITS

Plan Description

The City provides medical coverage for retirees and their spouses. This coverage is available for employees who satisfy the requirements for retirement under the California Public Employees Retirement System (PERS), which is age 50 or older with at least five years of State public agency service. The healthcare coverage provided by PERS meets the definition of Other Post-Employment Benefits (OPEB) as described in GASB Statement 45.

Medical plan benefits are provided through PERS, as permitted by the Public Employees' Medical and Hospital and Care Act (PEMHCA). As a PEMHCA employer, the City has elected the equal contribution method, where the contribution will remain the same annually.

Funding Policy

The contribution requirements of the City are established and may be amended by the City Council. The required contribution is based on pay-as-you-go financing requirements. For fiscal year 2016-17, the City contributed $136,161 to the plan, which represents the total current premiums.

Annual OPEB Cost and Net OPEB Obligation

The City's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer (ARC). The City has elected to calculate the ARC and related information using the alternative measurement method permitted by GASB Statement 45 for employers in plans with fewer than one hundred total plan members. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not-to-exceed thirty years. The following table shows the components of the City's annual OPEB cost for the year, the amount contributed to the plan, and changes in the City's net OPEB obligation to the plan:

Annual Required Contribution	$ 178,550
Interest on Net OPEB Obligation	3,043
Amortization of Net OPEB Obligation	(4,618)
Annual OPEB Cost	176,975
Payments Made	(136,161)
Increase in Net OPEB Obligation	40,814
Net OPEB Obligation - Beginning of the Year	376,881
Net OPEB Obligation - End of Year	$ 417,695

The City's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2016-17 and the two preceding years were as follows:

Fiscal Year	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation
6/30/17	$ 176,975	77%	$ 417,695
6/30/16	188,909	70%	376,881
6/30/15	188,909	67%	320,469

8. OTHER POST EMPLOYMENT BENEFITS - Continued

Funded Status and Funding Progress

As of the most recent valuation, June 30, 2016, the actuarial accrued liability for benefits was $2,895,202, all of which was unfunded, with a funded ratio of 0.0%.

The projections of future benefit payments for an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The following simplifying assumptions were made:

Retirement for active employees – Based on the historical average retirement age for the covered group, active safety plan members were assumed to retire at age 56 and active miscellaneous plan members were assumed to retire at age 60, or at the first subsequent year in which the member would qualify for benefits.

Marital status – Marital status of members at the calculation date was assumed to continue throughout retirement.

Mortality – Life expectancies were based on mortality tables from the U.S. Census Bureau.

Health insurance premiums – 2016 health insurance premiums for retirees were used as the basis for calculation of the present value of total benefits to be paid.

Payroll growth rate – The expected long-term payroll growth rate was assumed to equal 2.30%.

Based on the historical and expected returns, a discount rate of 3.5 percent was used. In addition, as simplified version of the entry age actuarial cost method was used. The unfunded actuarial accrued liability is being amortized as a level of percentage of projected payroll on an open basis. The remaining amortization period at June 30, 2017 was twenty-nine years.

9. RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters for which the City carries insurance as of the 2016-17 fiscal year. In prior years the City was a member of an insurance pool (San Diego Pooled Insurance Program Authority) which provided various levels of pooled liability coverage and property insurance, subject to self-insured retention levels and deductibles.

As of the 2016-17 fiscal year, the City's insurance coverage is provided through the CSAC Excess Insurance Authority, as follows:

9. RISK MANAGEMENT – Continued

Program	Limits	SIR/ Deductible
Excess Workers' Compensation	Statutory	$ 125,000
General Liability	$ 25,000,000	100,000
Property	Various	5,000
Crime	15,000,000	2,500
Cyber Liability	Various	50,000
Excess Liability	25,000,000	25,000
Pollution	10M/100M	75,000

Claims liabilities of the City are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported (IBNR). The result of the process to estimate the claims liability is not an exact amount as it depends on many complex factors, such as inflation, changes in legal doctrines, and damage awards. Accordingly, claims are reevaluated periodically to consider the effects of inflation, recent claim settlement trends (including frequency and pay-out amounts), and other economic and social factors. Settlements have not exceeded coverage for each of the past three fiscal years.

The City's claims activity is reported in internal service funds. The following is a summary of changes in claims liabilities for the past three years:

	Fiscal Year Ending June 30,		
	2017	2016	2015
Beginning of Year	$ 188,787	$ 225,895	$ 393,999
Incurred Claims	528,750	94,846	-
Claim Payments	(28,142)	(131,954)	(168,104)
End of Year	$ 689,395	$ 188,787	$ 225,895

The estimated Claims Liability at June 30, 2017 of $689,395 is reported in the City's Governmental Activities and Business-type Activities in the following amounts: $494,163 and $195,232, respectively.

10. FUND BALANCES

The details of fund balances as of June 30, 2017 are as follows:

	General Fund	Housing Fund	Transnet Fund	Nonmajor Governmental Funds	Total
Nonspendable:					
Prepaid Items	$ 8,578	$ -	$ -	$ -	$ 8,578
Restricted for:					
Housing	-	7,235,458	-	-	7,235,458
Public Safety	-	-	-	761,986	761,986
Streets and Transportation	-	-	-	780,046	780,046
Community Development	-	-	-	247,822	247,822
Parks and Recreation	-	-	-	86,600	86,600
Unassigned	5,288,540	-	(728,296)	(61,184)	4,499,060
Total Fund Balances	$ 5,297,118	$ 7,235,458	$ (728,296)	$ 1,815,270	$ 13,619,550

11. JOINT POWERS AUTHORITY

The City is a member of the Heartland Communications Facility Authority (HCFA). HCFA was created to equip, maintain, operate and staff a facility which provides emergency call receiving and dispatching services to participating agencies. No determination has been made as to each participant's proportionate share of fund equity as of June 30, 2017.

Complete financial statements may be obtained at the City of El Cajon, Finance City, 200 E. Main Street, El Cajon, CA 92020.

12. SUCCESSOR AGENCY FOR THE FORMER REDEVELOPMENT AGENCY

A. Background

On December 29, 2011, the California Supreme Court upheld Assembly Bill X126 (the Bill) that provides for the dissolution of all redevelopment agencies in the State of California. This action impacted the reporting entity of the City since the City had previously reported its redevelopment agency as a blended component unit in the City's financial statements.

The Bill provides that upon dissolution of the redevelopment agency, either the City or another unit of local government will agree to serve as the "Successor Agency" to hold the assets of the dissolved redevelopment agency until they are distributed to other units of state and local government. On January 17, 2012, the City Council adopted Resolution No. 3071, electing to become the Successor Agency for the former redevelopment agency in accordance with the Bill.

After enactment of the law, which occurred on June 28, 2011, redevelopment agencies in the State of California were prohibited from entering into new projects, obligations or commitments. Subject to the control of a newly established oversight board, remaining assets can only be used to pay enforceable obligations in existence at the date of dissolution, including the completion of any unfinished projects that were subject to legally enforceable contractual commitments.

In future fiscal years, Successor Agencies will only be allocated revenue in the amount that is necessary to pay the estimated annual payments on enforceable obligations of the former redevelopment agency until all enforceable obligations of the prior redevelopment agency have been paid in full and all assets have been liquidated.

The Bill directs the State Controller of the State of California to review the propriety of any transfers of assets between redevelopment agencies and other public bodies that occurred in January 1, 2011. If the public body that received such transfers is not contractually committed to a third party for the expenditure or encumbrance of those assets, the State Controller is required to order the available assets to be transferred to the public body designated as the Successor Agency by the Bill.

The California Department of Finance has approved the Lemon Grove Successor Agency's Long-range Management Plan and has also issued a Finding of Completion. The State continues to monitor the Recognized Obligation Payment Schedule (ROPS) that is filed annually by the Successor Agency.

13. COMMITMENTS AND CONTINGENCIES

A. Grants

Amounts received or receivable from grant agencies are subject to audit and adjustment by grantor agencies. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures that maybe disallowed by the grantor cannot be determined at this time, although the government expects such amounts, if any, to be immaterial.

13. COMMITMENTS AND CONTINGENCIES – Continued

B. Successor Agency

Amounts paid and accrued for the year ended June 30, 2017 (and subsequent years in which the Successor Agency is in operation) are subject to review by various State agencies and the County in which the Successor Agency resides. If any expenses incurred by the Successor Agency are disallowed by the State agencies or County, the City, acting as the Successor Agency could be liable for the repayment of the disallowed costs from either its own funds or by the State withholding remittances normally paid to the City. The amount, if any, of expenses that may be disallowed by the State agencies or County cannot be determined at this time, although the Successor Agency expects such amounts, if any, to be immaterial.

C. Other Commitments and Contingencies

At June 30, 2017, the City had outstanding construction contracts of approximately $2.9 million. In addition, the City is a defendant in various pending lawsuits of a nature common to many similar jurisdictions. City management and legal counsel estimates that the potential claims against the City not covered by insurance resulting from such litigation would not materially affect the City's financial statements.

14. FUND DEFICITS

The following non-major funds have negative fund balance as of June 30, 2017:

Special Revenue Funds:	
Gas Tax	$ 21,785
TDA	31,682
Storm Water	6,302
Capital Project Funds:	
Main Street Promenade CFD	1,415

These deficits are expected to be eliminated with the receipt of grant awards and future revenues.

15. PRIOR PERIOD ADJUSTMENTS

The City recorded the following prior period adjustments, as described on the following page:

	General Fund	Nonmajor Funds	Sanitation Fund and Business-type Activities	Succ. Agency Private-purpose Trust Fund	Governmental Activities
	$ (3,719,687) (1)	$ 187,081 (3)	$ (57,901) (2)	$ 222,399 (4)	$ (3,719,687) (1)
	(62,157) (2)	-	-	(712,786) (5)	(62,157) (2)
	333,010 (9)	-	-	680 (2)	187,081 (3)
	-	-	-	(333,010) (9)	(196,443) (6)
	-	-	-	-	694,104 (5)
	-	-	-	-	(740,363) (7)
	-	-	-	-	177,875 (8)
	-	-	-	-	333,010 (9)
Total Adjusments	(3,448,834)	187,081	(57,901)	(822,717)	(3,326,580)
Beginning Balance	8,461,602	645,073	21,117,409	(13,179,146)	57,211,294
Restated Balance	$ 5,012,768	$ 832,154	$ 21,059,508	$ (14,001,863)	$ 53,884,714

15. PRIOR PERIOD ADJUSTMENTS – Continued

(1) To record an allowance for doubtful accounts for the amount due from the Successor Agency, due to the nature of the receivable (see Note 4).

(2) To record adjustments to payroll-related liability accounts applicable to prior fiscal years.

(3) To increase Fund Balance in the Transportation Mitigation Fund and Net Position in Governmental Activities for revenue reported as unearned in the prior year.

(4) To remove the Net Pension Liability and related balances from the Successor Agency Trust Fund.

(5) To move capital assets incorrectly reported in the Successor Agency Trust Fund in previous fiscal years to Governmental Activities.

(6) To remove amounts incorrectly reported as Construction in Progress in the previous fiscal year.

(7) Net increase in Governmental Activities long-term debt as follows: $(62,419) decrease in Compensated Absences; $402,508 increase in Capital Leases; $400,274 increase in the Net Pension Liability.

(8) Net increase for Deferred Outflows and Inflows related to the Net Pension Liability, previously reported in the Successor Agency.

(9) To record loans from the City to the Successor Agency, repaid in the 2016-17 fiscal year, but previously unrecorded.

16. INTERFUND RECEIVABLES, PAYABLES, AND TRANSFERS

The $936,434 reported in the General Fund as due from other funds consists of $770,653 due from the Transnet Special Revenue Fund and $165,781 due from nonmajor governmental funds. These temporary, interfund borrowings result from routine cash flows and are expected to be repaid within the next fiscal year.

Transfers of $552,400 and $100,000 were made from the Sanitation Fund to the General Fund and the Gas Tax Fund, respectively, in accordance with the adopted budget for administrative costs.

REQUIRED SUPPLEMENTARY INFORMATION

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - General Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Taxes and Special Assessments	$ 10,788,000	$ 10,613,000	$ 10,882,008	$ 269,008
Licenses, Fees, and Permits	640,000	570,000	464,877	(105,123)
Fines and Forfeitures	146,000	146,000	229,624	83,624
Intergovernmental Revenues	17,000	17,000	32,368	15,368
Charges for Services	375,700	375,700	440,756	65,056
Use of Money and Property	243,320	243,320	280,599	37,279
Other Revenues	10,000	10,000	497,209	487,209
Total Revenues	12,220,020	11,975,020	12,827,441	852,421
EXPENDITURES				
Current:				
General Government	1,215,800	1,143,820	1,025,265	118,555
Public Safety	9,682,300	9,694,300	9,710,139	(15,839)
Public Works	1,345,000	1,344,980	1,419,603	(74,623)
Community Development	683,700	683,700	566,562	117,138
Capital Outlay	-	210,000	194,550	15,450
Debt Service:				
Principal	76,545	76,545	76,545	-
Interest	10,155	10,155	10,143	12
Total Expenditures	13,013,500	13,163,500	13,002,807	160,693
Excess (Deficiency) of Revenues over Expenditures	(793,480)	(1,188,480)	(175,366)	1,013,114
OTHER FINANCING SOURCES (USES)				
Transfers In	1,028,600	1,028,600	685,400	(343,200)
Transfers Out	(235,120)	(235,120)	(225,684)	9,436
Total Other Financing Sources (Uses)	793,480	793,480	459,716	(333,764)
Net Change in Fund Balances	-	(395,000)	284,350	679,350
Fund Balance, Beginning of Year	5,012,768	5,012,768	5,012,768	-
Fund Balance, End of Year	$ 5,012,768	$ 4,617,768	$ 5,297,118	$ 679,350

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Housing Special Revenue Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Intergovernmental Revenues	$ -	$ -	$ 1,486,326	$ 1,486,326
Total Revenues	-	-	1,486,326	1,486,326
EXPENDITURES				
Capital Outlay	1,500,000	1,500,000	1,337,304	162,696
Total Expenditures	1,500,000	1,500,000	1,337,304	162,696
Excess (Deficiency) of Revenues over Expenditures	(1,500,000)	(1,500,000)	149,022	1,649,022
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	(1,500,000)	(1,500,000)	149,022	1,649,022
Fund Balance, Beginning of Year	7,086,436	7,086,436	7,086,436	-
Fund Balance, End of Year	$ 5,586,436	$ 5,586,436	$ 7,235,458	$ 1,649,022

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Transnet Special Revenue Fund
Year Ended June 30, 2017

	Budgeted Amounts		Actual	Variance with Final Budget Positive
	Original	Final	Amounts	(Negative)
REVENUES				
Intergovernmental Revenue	$ 2,346,700	$ 3,527,687	$ 2,007,654	$ (1,520,033)
Other	-	-	-	-
Total Revenues	2,346,700	3,527,687	2,007,654	(1,520,033)
EXPENDITURES				
Current:				
General Government	93,600	93,600	76,528	17,072
Capital Outlay	2,260,000	3,527,687	2,357,785	1,169,902
Total Expenditures	2,353,600	3,621,287	2,434,313	1,186,974
Excess (Deficiency) of Revenues over Expenditures	(6,900)	(93,600)	(426,659)	(333,059)
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	(6,900)	(93,600)	(426,659)	(333,059)
Fund Balance, Beginning of Year	(301,637)	(301,637)	(301,637)	-
Fund Balance, End of Year	$ (308,537)	$ (395,237)	$ (728,296)	$ (333,059)

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

Schedule of the City's Proportionate Share of the Net Pension Liability
Last 10 Years*

Measurement Date	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Employee Payroll	Proportionate Share of the Net Pension Liability as a % of Payroll	Plan Fiduciary Net Position as a % of the Total Pension Liability
2016	0.077112%	$ 6,672,556	$ 3,966,818	168.21%	74.06%
2015	0.102377%	7,027,037	4,140,577	169.71%	78.40%
2014	0.101819%	6,335,672	3,916,214	161.78%	79.82%

Notes to the Schedule of the City's Proportionate Share of the Net Pension Liability

Benefit Changes: The figures above do not include any liability impact that may have resulted from plan changes which occurred after the June 30, 2015 valuation date. This applies for voluntary benefit changes as well as any offers of Two Years Additional Service Credit (a.k.a. Golden Handshakes).

Changes in Assumptions: None

*Fiscal year 2015 was the first year of implementation; therefore, not all 10 years of information are available.

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

Schedule of Plan Contributions
Last 10 Years*

Fiscal Year	Contractually Required Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency/ (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 813,911	$ (813,911)	$ -	$ 4,129,783	19.71%
2016	909,279	(2,737,595)	(1,828,316)	3,966,818	69.01%
2015	929,245	(1,194,245)	(265,000)	3,854,444	30.98%

Notes to the Schedule of Plan Contributions

Valuation Date: 6/30/2013, 6/30/2014, and 6/30/2015

*Fiscal year 2015 was the first year of implementation; therefore, not all 10 years of information are available.

City of Lemon Grove
Required Supplementary Information
Year Ended June 30, 2017

SCHEDULE OF FUNDING PROGRESS

Other Post-Employment Benefits Plan

Actuarial Valuation Date	Actuarial Asset Value	Entry Age Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio AVA	Covered Payroll	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll
	(a)	(b)	(b) - (a)	(a)/(b)	(c)	[(b)-(a)]/(c)
06/30/12	$ -	$ 2,697,679	$ 2,697,679	0.00%	$ 3,742,383	72.1%
06/30/14	-	2,803,349	2,803,349	0.00%	3,916,214	71.6%
06/30/16	-	2,895,202	2,895,202	0.00%	3,854,444	75.1%

1. BUDGETS AND BUDGETARY ACCOUNTING

A. Budgetary Control and Budgetary Accounting

The City Council approves each fiscal year's budget submitted by the City Manager prior to the beginning of the new fiscal year. Public hearings are conducted prior to its adoption by the council. Supplemental appropriations, where required during the period, are also approved by the Council. Budget transfers that affect the total appropriations for any fund require City Council approval. Budget transfers within a budget code with no change in appropriation within the budget code are approved by the City Manager only and do not require approval by the City Council. A budget code could be a program, or a division of a City, or a City. In most cases, expenditures may not legally exceed appropriations at the budget code level for the General Fund, and fund level for Special Revenue, Capital Projects, and Debt Service Funds.

At fiscal year-end, all operating budget appropriations lapse with the exception of encumbered and continuing appropriations.

Budgets are adopted for all funds.

B. Encumbrances

Encumbrances are estimations of costs related to unperformed contracts for goods and services. These commitments are recorded for budgetary control purposes in the General, Special Revenue, and Capital Projects funds. They represent the estimated amount of the expenditure ultimately to result if unperformed contracts in-process at fiscal year-end are completed. They do not constitute expenditures or estimated liabilities.

C. Continuing Appropriations

The unexpected and unencumbered appropriations that are available and recommended for continuation are approved by the City Council for carryover to the following fiscal year.

D. Budget Basis of Accounting

Budgets for governmental funds are adopted on a basis consistent with accounting principles generally accepted in the United States of America (US GAAP).

SUPPLEMENTARY INFORMATION

City of Lemon Grove
Non-major Governmental Funds
Year Ended June 30, 2017

Special Revenue Funds

Gas Tax Fund is supported by revenue from the State gas tax fund. Fund proceeds may be used to research, plan, construct, improve, maintain and operate local streets.

Parkland Dedication Fund accounts for fees in-lieu of dedicating park land that are to be used for the purchase of park land, the development of new parks, or the major rehabilitation of existing parks.

Supplemental Law Enforcement Service Fund accounts for State grant proceeds to be used to augment the staffing level of Sheriff deputies.

Sundry Grants Fund accounts for grants currently being administered by the City.

CDBG Fund accounts for grant proceeds from the Community Development Block Grant program. Funds are expended and then reimbursed by the County of San Diego.

TDA Fund accounts for transit proceeds allocated from MTS for maintenance of landscaping along the trolley corridor and maintenance of trolley stations and bus shelters throughout the City.

Lighting District Fund accounts for activities relating to the Roadway Lighting District which provides for street light benefits and enhanced lighting benefits.

Storm Water Fund accounts for designated storm water program fees and support the City's storm water program - a State and Federal mandated program.

Household Hazardous Waste Fund accounts for the City's household hazardous waste disposal program. This program is supported by AB 939 funds which are collected for this and recycling related programs. The City relies on this fund for contractual services to provide household hazardous waste events and to promote a higher level of recycling within the City.

Wild Flower Assessment Fund accounts for the Wildflower Landscaping Maintenance Assessment District.

PEG (Public/Education/Government) Fund accounts for designated monies from cable franchisees that operate within the City. The use of these monies is restricted to capital items that enhance or facilitate public access to government information.

Serious Traffic Offender Fund accounts for impound fees to pay for Sheriff traffic division overtime and other traffic related expenses.

Capital Project Funds

Street Construction Fund accounts for amounts which are restricted for larger street projects.

Sidewalk Reserve Fund accounts for amounts restricted for larger sidewalk projects.

Main Street Promenade CFD Fund accounts for voter-approved assessments for capital improvements.

Safety Capital Purchases Fund accounts for one-time "SAFE" program monies restricted for public safety capital expenditures.

Transportation Mitigation Fund accounts for fees related to the passage of the Transnet extension. These fees represent per housing unit fees for new residential development. Expenditures from this fund are to be used to initiate street improvement projects on a major arterial within the City.

City of Lemon Grove
Combining Balance Sheet
Non-major Governmental Funds
June 30, 2017

	Special Revenue			
	Gas Tax	Parkland Dedication	Supplemental Law Enforcement Service	Sundry Grants
ASSETS				
Cash and Investments	$ 802	$ 86,456	$ 43,899	$ 78,521
Accounts Receivable	-	144	-	41,922
Prepaids	-	-	-	-
Total Assets	$ 802	$ 86,600	$ 43,899	$ 120,443
LIABILITIES				
Accounts Payable	$ 168	$ -	$ -	$ 20,694
Accrued Liabilities	22,419	-	-	-
Deposits	-	-	-	-
Due to Other Funds	-	-	-	-
Total Liabilities	22,587	-	-	20,694
DEFERRED INFLOWS OF RESOURCES				
Unavailable Revenues - Grants Receivable	-	-	-	20,000
Total Deferred Inflows of Resources	-	-	-	20,000
FUND BALANCE (DEFICITS)				
Restricted	-	86,600	43,899	79,749
Committed	-	-	-	-
Unassigned	(21,785)	-	-	-
Total Fund Balances	(21,785)	86,600	43,899	79,749
Total Liabilities, Deferred Inflows of Resources and Fund Balances (Deficits)	$ 802	$ 86,600	$ 43,899	$ 120,443

Special Revenue						
CDBG	TDA	Lighting District	Storm Water	Household Hazardous Waste	Wild Flower Assessment
$ -	$ -	$ 394,864	$ -	$ 194,456	$ 4,858
134,838	123,597	2,739	-	2,137	6
-	-	-	-	-	-
$ 134,838	$ 123,597	$ 397,603	$ -	$ 196,593	$ 4,864
$ 6,543	$ 9,920	$ 18,818	$ 5,248	$ 1,842	$ 920
-	1,229	3,402	1,054	1,039	(493)
-	-	-	-	61,503	-
128,295	36,360	-	-	-	-
134,838	47,509	22,220	6,302	64,384	427
-	107,770	-	-	-	-
-	107,770	-	-	-	-
-	-	375,383	-	132,209	4,437
-	-	-	-	-	-
-	(31,682)	-	(6,302)	-	-
-	(31,682)	375,383	(6,302)	132,209	4,437
$ 134,838	$ 123,597	$ 397,603	$ -	$ 196,593	$ 4,864

Continued

City of Lemon Grove
Combining Balance Sheet
Non-major Governmental Funds - Continued
June 30, 2017

	Special Revenue		Capital Projects	
	PEG (Public/ Education/ Government)	Serious Traffic Offender Program	Street Construction	Sidewalk Reserve
ASSETS				
Cash and Investments	$ 227,809	$ 29,291	$ 158,967	$ 23,223
Accounts Receivable	15,576	48	263	38
Prepaids	-	-	-	-
Total Assets	$ 243,385	$ 29,339	$ 159,230	$ 23,261
LIABILITIES				
Accounts Payable	$ -	$ (1,235)	$ -	$ -
Accrued Liabilities	-	79	-	-
Deposits	-	-	-	-
Due to Other Funds	-	-	-	-
Total Liabilities	-	(1,156)	-	-
DEFERRED INFLOWS OF RESOURCES				
Unavailable Revenues - Grants Receivable	-	-	-	-
Total Deferred Inflows of Resources	-	-	-	-
FUND BALANCE (DEFICITS)				
Restricted	243,385	30,495	159,230	23,261
Committed	-	-	-	-
Unassigned	-	-	-	-
Total Fund Balances	243,385	30,495	159,230	23,261
Total Liabilities, Deferred Inflows of Resources and Fund Balances (Deficits)	$ 243,385	$ 29,339	$ 159,230	$ 23,261

Capital Projects			
Main Street Promenade CFD	Safety Capital Purchases	Transportation Mitigation	Total Non-major Governmental Funds
$ -	$ 180,000	$ 516,951	$ 1,940,097
-	-	855	322,163
-	-	-	-
$ -	$ 180,000	$ 517,806	$ 2,262,260
$ 289	$ -	$ -	$ 63,207
-	-	-	28,729
-	-	-	61,503
1,126	-	-	165,781
1,415	-	-	319,220
-	-	-	127,770
-	-	-	127,770
-	180,000	517,806	1,876,454
-	-	-	-
(1,415)	-	-	(61,184)
(1,415)	180,000	517,806	1,815,270
$ -	$ 180,000	$ 517,806	$ 2,262,260

City of Lemon Grove
Combining Statement of Revenues, Expenditures and Changes in Fund Balances
Non-major Governmental Funds
Year Ended June 30, 2017

	Special Revenue			
	Gas Tax	Parkland Dedication	Supplemental Law Enforcement Service	Sundry Grants
REVENUES				
Taxes	$ -	$ -	$ -	$ -
Intergovernmental Revenues	473,051	-	129,324	1,140,311
Charges for Services	-	16,137	-	-
Use of Money and Property	-	594	-	-
Other	-	-	-	-
Total Revenues	473,051	16,731	129,324	1,140,311
EXPENDITURES				
Current:				
General Government	-	-	-	-
Public Safety	-	-	-	-
Public Works	592,346	-	-	388,634
Community Development	-	-	-	173,762
Capital Outlay	-	43,317	-	-
Total Expenditures	592,346	43,317	-	562,396
Excess (Deficiency) of Revenues Over Expenditures	(119,295)	(26,586)	129,324	577,915
OTHER FINANCING SOURCES (USES)				
Transfers In	100,000	-	-	109,134
Transfers Out	-	-	(100,000)	-
Total Other Financing Sources (Uses)	100,000	-	(100,000)	109,134
Net Change in Fund Balances	(19,295)	(26,586)	29,324	687,049
Fund Balances, Beginning of Year (Restated)	(2,490)	113,186	14,575	(607,300)
Fund Balances, End of Year	$ (21,785)	$ 86,600	$ 43,899	$ 79,749

Special Revenue					
CDBG	TDA	Lighting District	Storm Water	Household Hazardous Waste	Wild Flower Assessment
$ -	$ -	$ 272,231	$ -	$ 26,522	$ 9,585
134,838	123,593	-	-	-	-
-	-	-	57,702	-	-
-	125	2,696	-	1,161	20
-	-	-	-	54	-
134,838	123,718	274,927	57,702	27,737	9,605
-	-	-	-	35,767	-
-	-	-	-	-	-
-	31,991	301,035	181,333	-	-
-	-	-	-	-	9,852
134,838	85,150	-	-	-	-
134,838	117,141	301,035	181,333	35,767	9,852
-	6,577	(26,108)	(123,631)	(8,030)	(247)
-	-	-	117,329	-	-
-	(17,400)	(14,300)	-	(1,979)	(100)
-	(17,400)	(14,300)	117,329	(1,979)	(100)
-	(10,823)	(40,408)	(6,302)	(10,009)	(347)
-	(20,859)	415,791	-	142,218	4,784
$ -	$ (31,682)	$ 375,383	$ (6,302)	$ 132,209	$ 4,437

Continued

City of Lemon Grove
Combining Statement of Revenues, Expenditures and Changes in Fund Balances
Non-major Governmental Funds - Continued
Year Ended June 30, 2017

	Special Revenue		Capital Projects	
	PEG (Public/ Education/ Government)	Serious Traffic Offender Program	Street Construction	Sidewalk Reserve
REVENUES				
Taxes	$ -	$ -	$ -	$ -
Intergovernmental Revenues	-	-	-	-
Charges for Services	61,883	-	-	-
Use of Money and Property	1,298	200	955	139
Other	-	6,890	-	-
Total Revenues	63,181	7,090	955	139
EXPENDITURES				
Current:				
General Government	34,908	-	-	-
Public Safety	-	12,620	-	-
Public Works	-	-	-	-
Community Development	-	-	-	-
Capital Outlay	-	-	-	-
Total Expenditures	34,908	12,620	-	-
Excess (Deficiency) of Revenues Over Expenditures	28,273	(5,530)	955	139
OTHER FINANCING SOURCES (USES)				
Transfers In	-	-	-	-
Transfers Out	-	-	-	-
Total Other Financing Sources (Uses)	-	-	-	-
Net Change in Fund Balances	28,273	(5,530)	955	139
Fund Balances, Beginning of Year	215,112	36,025	158,275	23,122
Fund Balances, End of Year	$ 243,385	$ 30,495	$ 159,230	$ 23,261

Capital Projects			
Main Street Promenade CFD	Safety Capital Purchases	Transportation Mitigation	Total Non-major Governmental Funds
$ 11,746	$ -	$ -	$ 320,084
-	-	-	2,001,117
-	-	51,854	187,576
-	-	2,997	10,185
-	-	-	6,944
11,746	-	54,851	2,525,906
-	-	-	70,675
11,558	-	-	24,178
-	-	-	1,495,339
-	-	-	183,614
-	-	-	263,305
11,558	-	-	2,037,111
188	-	54,851	488,795
-	-	-	326,463
-	-	-	(133,779)
-	-	-	192,684
188	-	54,851	681,479
(1,603)	180,000	462,955	1,133,791
$ (1,415)	$ 180,000	$ 517,806	$ 1,815,270

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - State Gas Tax Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 543,100	$ 473,051	$ (70,049)
Total Revenues	543,100	473,051	(70,049)
EXPENDITURES			
Current:			
Public Works	623,100	592,346	30,754
Total Expenditures	623,100	592,346	30,754
Excess (Deficiency) of Revenues Over Expenditures	(80,000)	(119,295)	(39,295)
OTHER FINANCING SOURCES (USES)			
Transfers In	200,000	100,000	(100,000)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	200,000	100,000	(100,000)
Net Change in Fund Balances	120,000	(19,295)	(139,295)
Fund Balance, Beginning of Year	(2,490)	(2,490)	-
Fund Balance, End of Year	$ 117,510	$ (21,785)	$ (139,295)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Parkland Dedication
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 10,000	$ 16,137	$ 6,137
Use of Money and Property	-	594	594
Total Revenues	10,000	16,731	6,731
EXPENDITURES			
Capital Outlay	80,000	43,317	36,683
Total Expenditures	80,000	43,317	36,683
Excess (Deficiency) of Revenues Over Expenditures	(70,000)	(26,586)	43,414
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(70,000)	(26,586)	43,414
Fund Balance, Beginning of Year	113,186	113,186	-
Fund Balance, End of Year	$ 43,186	$ 86,600	$ 43,414

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - SLES Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 100,000	$ 129,324	$ 29,324
Total Revenues	100,000	129,324	29,324
EXPENDITURES			
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	100,000	129,324	29,324
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(100,000)	(100,000)	-
Total Other Financing Sources (Uses)	(100,000)	(100,000)	-
Net Change in Fund Balances	-	29,324	29,324
Fund Balance, Beginning of Year	14,575	14,575	-
Fund Balance, End of Year	$ 14,575	$ 43,899	$ 29,324

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Sundry Grants Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenues	$ 453,560	$ 1,140,311	$ 686,751
Total Revenues	453,560	1,140,311	686,751
EXPENDITURES			
Current:			
Public Works	392,855	388,634	(4,221)
Community Development	174,060	173,762	(298)
Total Expenditures	566,915	562,396	4,519
Excess (Deficiency) of Revenues over Expenditures	(113,355)	577,915	691,270
OTHER FINANCING SOURCES (USES)			
Transfers In	113,355	109,134	(4,221)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	113,355	109,134	(4,221)
Net Change in Fund Balances	-	687,049	687,049
Fund Balance, Beginning of Year	(607,300)	(607,300)	-
Fund Balance, End of Year	$ (607,300)	$ 79,749	$ 687,049

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - CDBG Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenue	$ 179,500	$ 134,838	$ (44,662)
Total Revenues	179,500	134,838	(44,662)
EXPENDITURES			
Capital Outlay	179,500	134,838	44,662
Total Expenditures	179,500	134,838	44,662
Excess (Deficiency) of Revenues over Expenditures	-	-	-
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	-	-	-
Fund Balance, Beginning of Year	-	-	-
Fund Balance, End of Year	$ -	$ -	$ -

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - TDA Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Intergovernmental Revenue	$ 121,200	$ 123,593	$ 2,393
Use of Money and Property	100	125	25
Other	237,400	-	(237,400)
Total Revenues	358,700	123,718	(234,982)
EXPENDITURES			
Current:			
Public Works	54,240	31,991	22,249
Capital Outlay	52,700	85,150	(32,450)
Total Expenditures	106,940	117,141	(10,201)
Excess (Deficiency) of Revenues over Expenditures	251,760	6,577	(245,183)
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(17,400)	(17,400)	-
Total Other Financing Sources (Uses)	(17,400)	(17,400)	-
Net Change in Fund Balances	234,360	(10,823)	(245,183)
Fund Balance, Beginning of Year	(20,859)	(20,859)	-
Fund Balance, End of Year	$ 213,501	$ (31,682)	$ (245,183)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Lighting District Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 251,700	$ 272,231	$ 20,531
Use of Money and Property	900	2,696	1,796
Total Revenues	252,600	274,927	22,327
EXPENDITURES			
Current:			
Public Works	318,750	301,035	17,715
Total Expenditures	318,750	301,035	17,715
Excess (Deficiency) of Revenues over Expenditures	(66,150)	(26,108)	40,042
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(14,300)	(14,300)	-
Total Other Financing Sources (Uses)	(14,300)	(14,300)	-
Net Change in Fund Balances	(80,450)	(40,408)	40,042
Fund Balance, Beginning of Year	415,791	415,791	-
Fund Balance, End of Year	$ 335,341	$ 375,383	$ 40,042

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Storm Water Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 68,300	$ 57,702	$ (10,598)
Total Revenues	68,300	57,702	(10,598)
EXPENDITURES			
Current:			
Public Works	203,420	181,333	22,087
Total Expenditures	203,420	181,333	22,087
Excess (Deficiency) of Revenues over Expenditures	(135,120)	(123,631)	11,489
OTHER FINANCING SOURCES (USES)			
Transfers In	135,120	117,329	(17,791)
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	135,120	117,329	(17,791)
Net Change in Fund Balances	-	(6,302)	(6,302)
Fund Balance, Beginning of Year	-	-	-
Fund Balance, End of Year	$ -	$ (6,302)	$ (6,302)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Household Hazardous Waste Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 20,000	$ 26,522	$ 6,522
Use of Money and Property	400	1,161	761
Other	-	54	54
Total Revenues	20,400	27,737	7,337
EXPENDITURES			
Current:			
General Government	60,320	35,767	24,553
Total Expenditures	60,320	35,767	24,553
Excess (Deficiency) of Revenues over Expenditures	(39,920)	(8,030)	31,890
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(6,200)	(1,979)	4,221
Total Other Financing Sources (Uses)	(6,200)	(1,979)	4,221
Net Change in Fund Balances	(46,120)	(10,009)	36,111
Fund Balance, Beginning of Year	142,218	142,218	-
Fund Balance, End of Year	$ 96,098	$ 132,209	$ 36,111

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Wildflower Assessment Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 9,100	$ 9,585	$ 485
Use of Money and Property	-	20	20
Total Revenues	9,100	9,605	505
EXPENDITURES			
Current:			
Community Development	16,570	9,852	6,718
Total Expenditures	16,570	9,852	6,718
Excess (Deficiency) of Revenues over Expenditures	(7,470)	(247)	7,223
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	(100)	(100)	-
Total Other Financing Sources (Uses)	(100)	(100)	-
Net Change in Fund Balances	(7,570)	(347)	7,223
Fund Balance, Beginning of Year	4,784	4,784	-
Fund Balance, End of Year	$ (2,786)	$ 4,437	$ 7,223

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - PEG Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 30,000	$ 61,883	$ 31,883
Use of Money and Property	500	1,298	798
Total Revenues	30,500	63,181	32,681
EXPENDITURES			
Current:			
General Government	37,000	34,908	2,092
Total Expenditures	37,000	34,908	2,092
Excess (Deficiency) of Revenues Over Expenditures	(6,500)	28,273	34,773
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(6,500)	28,273	34,773
Fund Balance, Beginning of Year	215,112	215,112	-
Fund Balance, End of Year	$ 208,612	$ 243,385	$ 34,773

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Serious Traffic Offender Special Revenue Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 100	$ 200	$ 100
Other	9,500	6,890	(2,610)
Total Revenues	9,600	7,090	(2,510)
EXPENDITURES			
Current:			
Public Safety	26,950	12,620	14,330
Total Expenditures	26,950	12,620	14,330
Excess (Deficiency) of Revenues Over Expenditures	(17,350)	(5,530)	11,820
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(17,350)	(5,530)	11,820
Fund Balance, Beginning of Year	36,025	36,025	-
Fund Balance, End of Year	$ 18,675	$ 30,495	$ 11,820

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Street Construction Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 400	$ 955	$ 555
Total Revenues	400	955	555
EXPENDITURES			
Capital Outlay	150,000	-	150,000
Total Expenditures	150,000	-	150,000
Excess (Deficiency) of Revenues over Expenditures	(149,600)	955	150,555
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(149,600)	955	150,555
Fund Balance, Beginning of Year	158,275	158,275	-
Fund Balance, End of Year	$ 8,675	$ 159,230	$ 150,555

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Sidewalk Reserve Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Use of Money and Property	$ 50	$ 139	$ 89
Total Revenues	50	139	89
EXPENDITURES			
Capital Outlay	-	-	-
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	50	139	89
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	50	139	89
Fund Balance, Beginning of Year	23,122	23,122	-
Fund Balance, End of Year	$ 23,172	$ 23,261	$ 89

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Main Street Promenade Community Facilities District
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Taxes	$ 14,600	$ 11,746	$ (2,854)
Total Revenues	14,600	11,746	(2,854)
EXPENDITURES			
Current:			
Public Safety	14,000	11,558	2,442
Total Expenditures	14,000	11,558	2,442
Excess (Deficiency) of Revenues over Expenditures	600	188	(412)
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	600	188	(412)
Fund Balance, Beginning of Year	(1,603)	(1,603)	-
Fund Balance, End of Year	$ (1,003)	$ (1,415)	$ (412)

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Safety Capital Purchases Capital Projects Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Other	$ -	$ -	$ -
Total Revenues	-	-	-
EXPENDITURES			
Capital Outlay	-	-	-
Total Expenditures	-	-	-
Excess (Deficiency) of Revenues over Expenditures	-	-	-
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	-	-	-
Fund Balance, Beginning of Year	180,000	180,000	-
Fund Balance, End of Year	$ 180,000	$ 180,000	$ -

City of Lemon Grove
Schedule of Revenues, Expenditures and Changes in Fund Balances
Budget and Actual - Transportation Mitigation Capital Project Fund
Year Ended June 30, 2017

	Final Budget	Actual Amounts	Variance with Final Budget Positive (Negative)
REVENUES			
Charges for Services	$ 100,000	$ 51,854	$ (48,146)
Use of Money and Property	-	2,997	2,997
Total Revenues	100,000	54,851	(45,149)
EXPENDITURES			
Capital Outlay	557,900	-	557,900
Total Expenditures	557,900	-	557,900
Excess (Deficiency) of Revenues Over Expenditures	(457,900)	54,851	512,751
OTHER FINANCING SOURCES (USES)			
Transfers In	-	-	-
Transfers Out	-	-	-
Total Other Financing Sources (Uses)	-	-	-
Net Change in Fund Balances	(457,900)	54,851	512,751
Fund Balance, Beginning of Year	462,955	462,955	-
Fund Balance, End of Year	$ 5,055	$ 517,806	$ 512,751


Van Lant &
Fankhanel, LLP
Certified Public Accountants

Attachment C

Appropriations Limit Worksheets Report

Van Lant & Fankhanel, LLP
Certified Public Accountants

INDEPENDENT ACCOUNTANT'S REPORT ON AGREED-UPON PROCEDURES APPLIED TO APPROPRIATIONS LIMIT WORKSHEETS

City Council
City of Lemon Grove
Lemon Grove, California

We have performed procedures enumerated below to be the accompanying Appropriations Limit worksheet of the City of Lemon Grove, for the year ended June 30, 2017. These procedures, which were agreed to by the City of Lemon Grove and the League of California Cities (as presented in the publication entitled *Agreed-upon Procedures Applied to the Appropriations Limitation Prescribed by Article XIIIB of the California Constitution)*, were performed solely to assist the City in meeting the requirements of Section 1.5 of Article XIIIB of the California Constitution. The City's management is responsible for the Appropriations Limit worksheet. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and our findings were as follows:

1. We obtained the completed worksheets and compared the limit and annual adjustment factors included in those worksheets to the limit and annual adjustment factors that were adopted by resolution of the City Council. We also compared the population and inflation options included in the aforementioned documents to those that were selected by a recorded vote of the City Council.

   Finding: Although the City used the correct factors provided by the State's Department of Finance, it appears an error was made in the calculation of the growth factor. This resulted in an understatement of the 2016-17 Appropriations Limit of approximately $268,000.

2. For the accompanying Appropriations Limit worksheet, we added last year's limit to total adjustments and agreed the resulting amount to this year's limit.

   Finding: No exceptions were noted as a result of our procedures, except as noted above.

Van Lant & Fankhanel, LLP
25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

3. We agreed the current year information presented in the accompanying Appropriations Limit worksheet to the other documents referenced in #1 above.

   Finding: No exceptions were noted as a result of our procedures, except as noted above.

4. We agreed the prior year appropriations limit presented in the accompanying Appropriations Limit worksheet to the prior year appropriations limit adopted by the City Council during the prior year.

   Finding: No exceptions were noted as a result of our procedures.

We were not engaged to, and did not, perform an examination, the objective of which would be the expression of an opinion on the accompanying Appropriations Limit worksheet. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. No procedures have been performed with respect to the determination of the appropriations limit for the base year, as defined by the League publication entitled *Article XIIIB of the California Constitution.*

This report is intended solely for the use of the City Council and management of the City of Lemon Grove and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

April 10, 2018

CITY OF LEMON GROVE
APPROPRIATIONS LIMIT COMPUTATION
2016 – 2017

		2016 - 2017
Change in Per Capita Personal Income		5.37%
Population Change		
City Population Growth		0.62%
Change in Per Capita Personal Income Converted to a Ratio		1.0537
Population Change Converted to a Ratio		1.0062
Calculation of Growth Factor		1.0540
2015 - 2016 Appropriations Limit	$ 43,261,317	
2016 - 2017 Appropriations Limit ($43,261,317 X 1.0540)	45,597,428	

Attachment D

Auditor's Communication to Governing Body

Van Lant & Fankhanel, LLP
Certified Public Accountants

April 10, 2018

City Council
City of Lemon Grove
Lemon Grove, CA

We have audited the financial statements of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of the City of Lemon Grove for the year ended June 30, 2017. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, *Government Auditing Standards,* and the Uniform Guidance, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated June 7, 2017. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the City are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the fiscal year. We noted no transactions entered into by the City during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

> Management's estimate of the fair value of investments is based on information provided by financial institutions. We evaluated the key factors and assumptions used to develop the fair value of investments in determining that it is reasonable in relation to the financial statements as a whole.

Van Lant & Fankhanel, LLP
25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

Management's estimate of capital assets depreciation is based on historical estimates of each capitalized item's useful life. We evaluated key factors and assumptions used to develop the estimated useful lives in determining that they are reasonable in relation to the financial statements as a whole.

Management's estimate of the net pension liability is based on actuarial information provided by the California Public Employee Retirement System's (CalPERS) actuarial office. We evaluated the key factors and assumptions to develop the net pension liability in determining that it is reasonable in relation to the financial statements as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosure affecting the financial statements were:

The disclosure of the fair value of investments in Note 2 to the financial statements represents amounts susceptible to market fluctuation.

The disclosures in Note 4 regarding an allowance for doubtful accounts established for the amounts owed to the City by the Successor Agency, is based on management's current estimates.

The disclosure of accumulated depreciation in Note 5 to the financial statements is based on estimated useful lives which could differ from actual useful lives of each capitalized item.

The disclosure of the net pension liability in Note 7 to the financial statements is based on the City's proportionate share of the total pension liability of the pool and includes assumptions for discount rates, which could differ from actual discount rates. Note 7 discloses the differences in the net pension liability assuming different discount rates.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated April 10, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the City's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the City's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

With respect to the supplementary information accompanying the financial statements, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

New Accounting Pronouncements

As described in Note 1 to the financial statements, in June 2016, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits and Other Than Pensions*. GASB Statement No. 75 will be required to be implemented for the fiscal year ending June 30,

2018 and will have an impact on how the City reports the outstanding liabilities related to postemployment benefits other than pensions. Note 1 also describes additional GASB Statements to be implemented in the future.

Restrictions on Use

This information is intended solely for the use of the City Council and management of the City and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Attachment E

Report on Internal Control Over Financial Reporting

Van Lant & Fankhanel, LLP
Certified Public Accountants

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

City Council
City of Lemon Grove
Lemon Grove, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, business-type activities, each major fund and the aggregate remaining fund information of the City of Lemon Grove (City), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated April 10, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying schedule of findings and responses, we identified certain deficiencies in internal control that we consider to be material weaknesses.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in item 2017-1 in the accompanying schedule of findings and responses to be a material weakness.

Van Lant & Fankhanel, LLP
25901 Kellogg Street
Loma Linda, CA 92354

909.856.6879

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying schedule of findings and responses as items 2017-2 to 2017-5 to be significant deficiencies.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

City of Lemon Grove's Responses to Findings

The City's responses to the findings identified in our audit are described in the accompanying schedule of findings and responses. The City's responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Van Lant & Fankhanel, LLP

April 10, 2018

CITY OF LEMON GROVE
SCHEDULE OF FINDINGS AND RESPONSES
Year Ended June 30, 2017

2017-1 Accounting Records/Financial Reporting

Condition:

In preparation for the 2016-17 annual audit, the City's Finance staff performed analysis and reconciliations of various accounts in the City's general ledger. Although the City provided us with analysis and supporting documentation when we began our year-end audit fieldwork, it became apparent that certain accounts had not yet been thoroughly analyzed and reconciled to supporting documentation. When we brought this to the City's attention, eventually the required analysis, reconciliations, and adjusting journal entries were made by City Finance personnel. However, this was completed several months after year-end, with adjustments still being made to the June 30, 2017 accounting records as late as February 2018. Affected accounts included certain revenues, receivables, capital assets, claims payable, and various payroll-related liabilities. Normally, the year-end accounting records should be fully analyzed, adjusted and reconciled within a few months after year-end.

As disclosed in the City's June 30, 2017 financial statements, some of the required adjustments involved revisions to the June 30, 2016 balances (prior period adjustments). It appeared that certain accounts had not been analyzed/reconciled for quite some time.

Criteria:

The City's management is responsible for establishing and maintaining effective internal controls over financial reporting to help ensure that appropriate goals and objectives are met. This responsibility includes the selection and application of accounting principles, ensuring that financial information is reliable and properly recorded, and evaluating and monitoring ongoing activities. The City's management is responsible for preparing accurate year-end accounting records and financial statements, in a timely manner.

Reconciliation and review of all balance sheet accounts and various revenue and expenditure accounts on a recurring basis, and especially at year-end, is a vital part of maintaining the integrity of the accounting and financial reporting system. Periodic reconciliations of all balance sheet and other selected accounts provide accurate data from which to base decisions, prevent costly errors and provide timely financial reports. Year-end analysis and documentation should be maintained on file, in an organized fashion, to provide evidence in support of financial statement amounts and disclosures. The City is subject to various financial reporting deadlines, including State and Federal requirements. This includes the California Government Code and the Single Audit requirements of the Federal Government.

If accounting records are not adequately maintained throughout each fiscal year, the year-end closing process tends to be more difficult and time-consuming, and may contribute to delays in issuing year-end reports.

2017-1 Accounting Records/Financial Reporting - Continued

Cause of Condition:

Based on the City's prior year audit reports and our firm's experience while performing the 2016-17 annual audit, the City's Finance Department has had significant problems in maintaining consistency in management personnel. During the 2016-17 audit process, the City had two temporary, part-time Finance Directors, while the Finance Manager resigned in the middle of our audit fieldwork without any notice.

In addition, it appears the City has not established and documented detailed accounting procedures for the year-end closing process.

Potential Effect of Condition:

Because of the issues mentioned above, the 2016-17 audit process was delayed. The City was not able to issue audited financial statements in a timely manner. Overall, the audit process was inefficient from our perspective, and, most likely, the City's perspective. In addition, the financial information and reports being utilized by City management were not necessarily accurate throughout the 2016-17 fiscal year, due to the significant adjustments made during the audit process.

Recommendation:

In order to maintain the integrity of the accounting and financial reporting system, and to ensure timely reporting, we recommend the City develop detailed, written procedures for the year-end closing process. This should include a checklist of all analysis/reconciliations to be performed along with the applicable due dates. All balance sheet accounts and other selected accounts should be analyzed as appropriate. We suggest a schedule of accounting functions to be performed be prepared with the provision for signing off upon completion. This will provide documentation for the year-end closing process even if there is turnover in Finance personnel.

The City should re-evaluate personnel practices and philosophies, especially in the Finance Department. While the City is subject to budget constraints, as are most government agencies, maintaining consistency in Finance management positions will help ensure accurate and timely financial reporting, and also compliance with applicable laws, regulations, and contract provisions. In the long run, having consistent, highly-qualified personnel in the Finance Department will help ensure that the City Council and other City Management are receiving accurate and timely financial information.

2017-1 Accounting Records/Financial Reporting - Continued

Management's Response:

We agree that the City's FY 2017 end-of-year closing was too long after year-end. As noted in the Auditor's "Cause of Condition" section, the City encountered some unusual personnel issues in the Finance Department. The City's management is currently implementing a plan to upgrade and stabilize the Finance Department. The City will establish a year-end checklist and reconcile all balance sheet accounts yearly at a minimum.

2017-2 Segregation of Incompatible Duties

Condition:

Our audit procedures included a review and evaluation of the City's business license function, including the billing and collection of business license fees. Based on our procedures, we noted that the cash receipts clerk at City Hall is responsible for administering the business license program. This includes the billing and collection functions, and maintaining the business license database.

Criteria:

In a strong internal control environment, the billing and collection functions should be segregated. The individual responsible for administering the business license function should not also be handling incoming payments.

Cause of Condition:

Incompatible duties performed by the same individual creates opportunity for business license revenues to be received but not recorded in the City's general ledger.

Potential Effect of Condition:

Lack of internal controls in the City's business license function could result in payments being collected that are not ultimately recorded in the City's general ledger and deposited into the City's bank accounts.

Recommendation:

We recommend the City evaluate the business license function to determine if the collection function could be segregated from the administration/billing function. At a minimum, City management should establish procedures for independent personnel to reconcile the business license activity to the revenue in the general ledger and bank deposits.

2017-2 Segregation of Incompatible Duties - Continued

Management's Response:

The City agrees that in a strong internal control environment, billing and collection functions should be segregated. The City's Finance Department has limited staff and complete segregation of duties is not always achievable. The City will institute several mitigating controls (for example: tasking the Accounting Analyst the responsibility of matching the business license reports with bank deposits on a monthly basis) to reduce the risks of fraud and errors that can occur with weak internal controls.

2017-3 Old Outstanding Checks/Bank Account Reconciliations

Condition:

Our review of various bank account reconciliations during the 2016-17 audit indicated that the City was carrying over several old outstanding checks each month. Some of these checks were issued in 2010, which does not appear to be in compliance with the City's established procedures. Also, the City has custody of certain funds and accounts held by a fiscal agent. During our audit, we noted these accounts had not been fully reconciled to the City's general ledger.

Criteria:

The City's "Financial Policy and Procedures Manual" includes a section regarding bank account reconciliations. This includes a section providing guidance on stale dated checks identified during the bank reconciliation process. It describes in detail the procedures to be performed for old outstanding checks.

Cause of Condition:

It is not clear why the City has not followed it's established procedures regarding stale dated checks, other than the lack of consistency in the Finance Department's management function. For the accounts held by a fiscal agent, the personnel turnover in the Finance Department appears to be the cause of certain accounts not being reconciled in a timely manner.

Potential Effect of Condition:

The City has recorded decreases to cash along with the related expenditures, for checks issued many years ago, which have not cleared the bank account. This can potentially result in cash (and fund balance) being understated, and the opportunity for the old outstanding checks to be misappropriated. For the fiscal agent accounts, various activity had not been recorded or reconciled for the 2016-17 fiscal year.

2017-3 Old Outstanding Checks/Bank Account Reconciliations - Continued

Recommendation:

We recommend that the City's management review the bank reconciliation function and procedures in relation to the established Financial Policy and Procedures Manual to determine if procedures are being followed. The review process for bank account reconciliations should also be revisited and revised accordingly, to ensure applicable policies are being followed.

Management's Response:

The City's bank reconciliation policy is in review and will be updated. Finance management will monitor the bank reconciliation process to ensure it is being followed.

2017-4 Travel Expenses/City Credit Cards

Condition:

While conducting audit procedures relating to disbursements/expenditures, we were unable to obtain a list of all City-issued credit cards. We also noted that the required travel authorization forms were not included in the supporting documentation for certain travel expenses paid by the City's credit cards. In our testing of credit card statements, we noted that one of them did not have the required signature for payment approval.

Criteria:

The City has established policies regarding the use of City credit cards and travel expenses. This includes the utilization of a "Travel Authorization/Expense Report."

Cause of Condition:

It appears that the City has not maintained a list of City-issued credit cards. It is not clear why the City has not adhered to the established procedures regarding "Travel Authorization/Expense Reports." Lack of approval signatures may be the result of the issues described in item 2017-1 above.

Potential Effect of Condition:

The City's travel expenses and other payments by credit card may not be adequately reviewed and approved. The condition described above could result in a lack of transparency for some of the City's disbursements/expenditures.

2017-4 Travel Expenses/City Credit Cards - Continued

Recommendation:

We recommend the City take steps to ensure that all travel costs and credit card payments are properly reviewed, approved and documented, in accordance with established policy.

Management's Response:

The City's travel form will be updated to conform to the City's travel policy. The City is creating a list of City-issued credit cards and will maintain the list going forward. All City travel costs and credit card payments will be reviewed, approved and documented, in accordance with established policy.

2017-5 Allocation of Salaries/Overhead to Restricted Funds

Condition:

Based on our testing of costs charged to the City's Gas Tax Fund (Fund), it appears the City is charging both direct salaries and indirect overhead costs to the Fund. Various percentages are used to allocate the salaries of certain positions, including Finance and Human Resources personnel, to the Fund. However, the City's staff was not able to provide us with documentation in support of these allocation methods. For example, we were not able to find a cost allocation study, or plan, which would provide evidence that these allocations are reasonable.

Criteria:

The State Controller's Office has established "Guidelines Relating to Gas Tax Expenditures" to be used by Cities and Counties. Section 440 regarding Overhead indicates, "Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead to all departments." For the sake of transparency, the City should ensure that all costs charged to restricted funds are adequately documented. This documentation should include evidence that overhead costs are equitable and reasonable, in relation to all costs incurred by the City.

Cause of Condition:

The City was not able to provide us with a cost allocation study or plan in support of the costs mentioned above. It is not clear why the City has not maintained documentation to ensure compliance with the State's requirements and to document the reasonableness of all overhead costs.

2017-5 Allocation of Salaries/Overhead to Restricted Funds - Continued

Potential Effect of Condition:

Unallowable costs could be charged to restricted funds, including the Gas Tax Fund.

Recommendation:

Based on discussions with City staff, it appears the City has taken steps to contract with a consultant to perform a salary distribution study. We recommend the City continue in these efforts to ensure all overhead costs are properly documented.

Management's Response:

The City is continuing its efforts to ensure all overhead costs are properly documented.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 3
Mtg. Date April 17, 2018
Dept. Public Works

Item Title: **City Sponsorship Program**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Recommendation:

Discuss and provide direction to staff regarding the City's sponsorship program amounts and benefits.

Item Summary:

In April 2014, the City Council adopted a sponsorship policy. Since that time staff operated under the parameters of said policy. During the past four years, staff observed that having separate sponsorship levels for each event was confusing and often duplicated efforts for sponsors that donated as title sponsors for more than one event. To clarify this observation, staff is recommending that the City Council consider the amendments to the sponsorship program (**Attachment D**). The staff report (**Attachment A**) provides additional details regarding the requested changes.

Fiscal Impact:

None.

Environmental Review:

- ☒ Not subject to review
- ☐ Negative Declaration
- ☐ Categorical Exemption, Section
- ☐ Mitigated Negative Declaration

Public Information:

- ☒ None
- ☐ Newsletter article
- ☐ Notice to property owners within 300 ft.
- ☐ Notice published in local newspaper
- ☐ Neighborhood meeting

Attachments:

A. Staff Report
B. Sponsorship Policy
C. Current Sponsorship Levels
D. Requested Sponsorship Levels

Attachment A

LEMON GROVE CITY COUNCIL
STAFF REPORT

Item No. 3

Mtg. Date April 17, 2018

Item Title: **City Sponsorship Program**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Discussion:

In April 2014, the City Council reviewed a new policy that captured what the City was already performing. After reviewing the draft policy and providing additional feedback to staff, the City Council adopted a sponsorship policy and sponsorship level (**Attachment B and C**). At that time, the City Council also wanted to maintain flexibility in future years, so tiers or dollar values were not incorporated into the policy. The chief benefit being that staff would not have to return in the future to formally approve a change in amounts or benefits of sponsorship.

The sponsorship policy established the parameters in which an external party could financially support the City's special event series each year. For a certain level of sponsorship that sponsor would receive a certain amount of publicity. The greater the sponsorship, the greater the promotional materials and events the City would perform.

Since the policy's adoption, staff continued to follow the policy as it was outlined. This staff report and proposed amendments were presented to the City Council in order to help streamline the sponsorship policy and help to simplify what the benefits will be for each level of sponsorship. For example, the current policy allocates each sponsorship to a specific special event (e.g. movies in the park, concerts in the park, or the annual bonfire). This often created a duplication of efforts for sponsors that donated as title sponsors for more than one event. In this instance a company could not be recognized twice for being the title sponsor for the movies in the park and the bonfire via the City's webpage or social media advertisements, so there could be a perceived decrease in value to be a title sponsor for multiple special events.

Looking forward staff is proposing a much simpler sponsorship level (**Attachment D**) that clarifies the benefits of each level and eliminates the redundancy that now occurs. This was accomplished by creating four primary sponsorship levels that will be evenly applied to all special events that the City plans. Additionally, another anticipated benefit is that when new special events are considered the same sponsorship program can be applied without having to change the levels or benefits to the sponsor at each level. To clarify this observation, staff is recommending that the City Council discuss and provide verbal feedback to staff regarding the recommended amendments to the sponsorship levels.

Alternatives:

The City Council has the alternative to not change the policy at this time and staff will continue to adhere to the policy as it was approved in 2014 or staff will receive feedback and incorporate that feedback into the updated sponsorship levels.

Conclusion:

Staff recommends that the City Council discusses and provides direction to staff regarding the City's sponsorship program amounts and benefits

EXHIBIT 1

CITY OF LEMON GROVE

SPONSORSHIP POLICY

PURPOSE

The purpose of this policy is to provide guidelines to develop and maintain sponsorships that support the vision of the City of Lemon Grove with the aim of enhancing the connectivity between businesses and the greater community. This policy acknowledges that business sponsorships provide an effective means of generating new revenue and providing resources to support services and programs throughout the City.

A sponsorship represents a relationship that is agreed upon between the City and another organization, business or individual where resources are combined to complete a mutually beneficial program, event or amenity. The level of investment is equitable and agreed upon in advance and all partners receive a return on their investment.

BACKGROUND

In an effort to maintain and enhance the quality of life, the City seeks ways to offset the cost of programs, events and amenities in the community. This policy has been developed to establish and guide relationships with potential sponsors who share in the City's commitment to maintain a vibrant community. The sponsorships are intended to generate revenue to fund programs, events and/or amenities, while assuring that public spaces remain inviting to the community.

Sponsorships may include, but are not limited to, the following:

- Monetary contributions to support an event, a City program or the construction / maintenance / enhancement of a City facility or amenity.
- Material contributions to support an event, a City program or the construction / maintenance / enhancement of a City facility or amenity.
- In-kind contributions from an organization specific to benefit an event, a City program or the construction / maintenance / enhancement of a City facility or amenity.

POLICIES

The City department in charge of the event, program or facility/amenity will develop sponsorship criteria specific to that project. Criteria involving individual donations valued at $10,000 or greater shall be approved by the City Council.

An individual, organization or business may also propose a sponsorship to the City. In such cases, sponsorships valued at less than $100 may be handled and addressed administratively by the department for whom the sponsorship is proposed. Any sponsorship valued at $10,000 or greater shall be presented to the City Council for review and if deemed appropriate, approval.

It is the intention of the City of Lemon Grove to exercise the right to refuse any potential sponsor if that sponsor does not meet with the goals, image or interest of the City. Advertising or sponsorships will not be accepted from the following parties:

- Companies whose business is substantially derived from the sale or manufacture of tobacco, alcohol, or firearms,
- Political campaign speech or speech that supports or opposes or appears to support or oppose a ballot measure, initiative or refers to any candidate in public office,

Attachment B

- Religious speech which advocates or opposes a religion or religious belief,
- Entities that practice or promote discrimination based on race, color, nationality, sexual orientation, age or disability, and
- Any situation where the City Manager determines there would be a conflict of interest.

Advertising submitted to the City in the course of a sponsorship agreement cannot contain the following:

- Profanity,
- Violence, racial intolerance or advocacy against any individuals, group or organization,
- Pornography, adult or mature content,
- Sales of weapons,
- Content which promotes illegal activity or infringes on the rights of others, or
- Political candidate's messaging.

The representative of the department in contact with the sponsor will:

- Guide the sponsor through the application and submittal process, providing interpretation as needed,
- Ensure terms and timelines in the agreement are followed by the City and the sponsor, and
- Track the results of the sponsorship for the department and sponsor records.

Attachment C

2014 City of Lemon Grove Special Event

Sponsorship Opportunities

35th Annual "Concerts in the Park" Thursday, June 26th - August 14th
Berry Street Park (5,000 Total Series Attendance)

Sponsorship Levels	Price	Sponsor Benefits
Title Sponsor	$2,500	• Logo on Downtown Concerts banner & all printed promo materials* (six weeks) • One 3' x 8' banner at all concerts • Logo on event banner displayed at each concert • Logo on City website and social media sites (one year)
Co-Sponsor	$1,000	• Logo on all printed promo materials* • Logo on event banner displayed at each concert • Logo on City website and social media sites (one year)
Supporting Sponsor	$500	• Logo on all promo materials* (four weeks) • Logo on City website and social media sites (one year)
Assisting Sponsor	$100	• Logo on City website and social media sites (one year)
*Promo materials include 250 posters, 15,000 flyers, and weekly press releases.		

7th Annual "Movies in the Park" July 18th & August 29th
Lemon Grove Park (1,100 Average Attendance)

Sponsorship Levels	Price	Sponsor Benefits
Title Sponsor	$1,000	• Logo on Downtown Movie banner & all printed promo materials* (4 weeks) • One 3' x 8' Company banner displayed at Movie Night • Logo on City website and social media sites (one year)
Co-Sponsor	$500	• Logo on all printed promo materials* • Logo on event banner displayed at Movie Night • Logo on City website and social media sites (one year)
Supporting Sponsor	$250	• Logo on all promo materials* (four weeks) • Logo on City website and social media sites (one year)
Assisting Sponsor	$100	• Logo on City website and social media sites (one year)
*Promo materials include 250 posters, 10,000 flyers, and weekly press releases.		

17th Annual "Community Bonfire" Friday, December 5th
Civic Center Park (1,500 – 2,000 Average Attendance)

Sponsorship Levels	Price	Sponsor Benefits
Title Sponsor	$1,500	• Logo on Downtown Bonfire banner & all printed promo materials* (four weeks) • One 3' x 8' Company banner displayed at Bonfire event • Logo on City website and social media sites (one year)
Co-Sponsor	$1,000	• Logo on all printed promo materials* • Logo on event banner displayed at Bonfire • Logo on City website and social media sites (one year)
Supporting Sponsor	$500	• Logo on all promo materials* (four weeks) • Logo on City website and social media sites (one year)
Assisting Sponsor	$100	• Logo on City website and social media sites (one year)
*Promo materials include 250 posters, 15,000 flyers, and weekly press releases.		

Attachment D

Proposed

City of Lemon Grove
Special Event Levels

Sponsorship Levels	Price	Sponsor Benefits
City Champion Sponsor	$7,000	• One 3' x 8' dedicated banner at all special events that includes the opportunity to host a company booth • Logo on the event banner displayed at all special events ** • Logo on all printed and advertised promotional flyers * • Logo on City website and social media sites (one year) • Invitation to attend the annual City Council sponsorship recognition presentation.
Promoting Sponsor	$5,000	• Logo on the event banner displayed at all special events ** • Logo on all printed and advertised promotional flyers * • Logo on City website and social media sites (one year) • Invitation to attend the annual City Council sponsorship recognition presentation.
Supporting Sponsor	$2,000	• Logo on all printed and advertised promotional flyers * • Logo on City website and social media sites (one year) • Invitation to attend the annual City Council sponsorship recognition presentation.
Assisting Sponsor	$1,000	• Logo on City website and social media sites (one year) • Invitation to attend the annual City Council sponsorship recognition presentation.
	$100 or less	• Thank you card will be sent to the sponsor.

* Promotional materials include at least 200 11" x 17" posters and over 10,000 flyers.

** There are at least 12 special events each year: 8 Concerts in the Park, 2 Movies in the Park, Annual Bonfire, Eggstravaganza.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 4
Mtg. Date April 17, 2018
Dept. City Manager's Department

Item Title: **Appointment of Five Planning Commission Members and Set Terms for Commission Members**

Staff Contact: Lydia Romero, City Manager

Recommendation:

Adopt a resolution (**Attachment B**) appointing five permanent members to the Lemon Grove Planning Commission and initial term for those members.

Item Summary:

On April 10, 2018 the City Council interviewed 15 applicants for five Planning Commission positions. After conducting the interviews with the candidates, the City Council nominated five applicants to the Planning Commission: Robert Bailey, Stephen Browne, Liana LeBaron, Seth Smith and Jessica Relucio.

Staff has prepared a Resolution (**Attachment B**) for the City Council's consideration appointing the five members to the Planning Commission, setting the initial terms of the members and establishing a Chair and Vice Chair of the Commission.

Fiscal Impact:

There is no fiscal impact.

Environmental Review:

☒ Not subject to review
☐ Negative Declaration
☐ Categorical Exemption
☐ Mitigated Negative Declaration

Public Information:

☒ None
☐ Newsletter article
☐ Tribal Government Consultation Request
☐ Notice published in local newspaper
☐ Notice to property owners within 500 ft.

Attachments:

A. Staff Report
B. Resolution 2018-

Attachment A

LEMON GROVE CITY COUNCIL
STAFF REPORT

Item No. **4**

Mtg. Date April 17, 2018

Item Title: **Appointment of Five Planning Commission Members and Set Terms for Commission Members**

Staff Contact: Lydia Romero, City Manager

Background and Discussion:

On March 6, 2018, the City Council adopted Ordinance 448 to re-establish the Planning Commission.

On April 10, 2018, the City Council interviewed 15 applicants for five Planning Commission positions. Following the interviews, they deliberated on the candidates and came to a unanimous consensus on the nomination of five applicants for the Planning Commission. The City Council also recommended the initial terms of Commission members and who would initially serve as Chair and Vice Chair until such time the Commission can establish their own procedures to choose a Chair and Vice Chair.

The individuals nominated, including terms and leadership are:

Robert Bailey	4 year term	Chair
Stephen Browne	4 year term	Vice Chair
Liana LeBaron	3 year term	Member
Jessica Relucio	2 year term	Member
Seth Smith	1 year term	Member

Conclusion:

Staff recommends that the City Council adopt a resolution (**Attachment B**) appointing five members to the Planning Commission, establishing the initial terms and Chair positions.

Attachment B

RESOLUTION NO. 2018

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMON GROVE, CALIFORNIA APPOINTING FIVE MEMBERS TO THE PLANNING COMMISSION, SETTING INTIAL TERMS OF THE MEMBERS AND APPOINTING THE INTIAL CHAIR AND VICE CHAIR OF THE PLANNING COMMISSION

WHEREAS, on March 6, 2018, the Lemon Grove City Council adopted Ordinance 448 re-establishing the Lemon Grove Planning Commission; and

WHEREAS, the application process to apply for a position on the Planning Commission occurred from February 28, 2018 to March 22, 2018; and

WHEREAS, through the recruitment process, 16 residents expressed interest in serving on the Planning Commission; and

WHEREAS, on April 10, 2018, the City Council interviewed the 15 candidates; and

WHEREAS, at the conclusion of the interview process, five candidates were nominated to be appointed to the Planning Commission; and

WHEREAS, the City Council also recommended initial terms for the five candidates and established the initial Chair and Vice Chair;

WHEREAS, the establishment of the one, two and three-year terms of office for the three permanent Community Advisory Commission members will be determined through the process of drawing straws.

NOW, THEREFORE, the City Council of the City of Lemon Grove, California hereby ordains as follows:

SECTION ONE:

The findings listed above are true and correct.

SECTION TWO:

Approves the appointment of the following five candidates to the Planning Commission:

1. Robert Bailey
2. Stephen Browne
3. Liana LeBaron
4. Jessica Relucio
5. Seth Smith

SECTION THREE:

Establishes the initial terms of the Planning Commission members:

1.	Robert Bailey	4 year term
2.	Stephen Browne	4 year term
3.	Liana LeBaron	3 year term
4.	Jessica Relucio	2 year term
5.	Seth Smith	1 year term

Attachment B

SECTION FOUR:

Establishes the initial Chair and Vice Chair of the Planning Commission:

Robert Bailey	Chair
Stephen Brown	Vice Chair

/ / / / /
/ / / / /

Notice of Intent to Adopt a Mitigated Negative Declaration

To: ___ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: (Public Agency) CITY OF LEMON GROVE
Development Services Dept.
3232 Main Street
Lemon Grove, CA 91945
(619) 825-3812

_X_ County Clerk
County of San Diego
P.O. Box 1750
1600 Pacific Highway, Room 260
San Diego, CA 92101

SUBJECT: Filing of Notice of Intention to Adopt a Mitigated Negative Declaration in compliance with Section 15072 of the California Code of Regulations Title 14, Chapter 3.

On April 17, 2018 at 6:00 PM, the City of Lemon Grove City Council will hold a public hearing in the City of Lemon Grove Community Center at 3146 School Lane, Lemon Grove, CA 91945, to consider a request to amend and comprehensively expand and update the City of Lemon Grove's 2005 Downtown Village Specific Plan. The Downtown Specific Plan (DSP) includes an expansion of the specific plan area within City limits from Massachusetts Avenue to the west, Highway 94 to the north, Washington Street to the east and Lincoln Street to the south (approximate). The DSP area consists of approximately 214 acres, inclusive of the original DVSP boundaries. The DSP will serve as a regulatory document that defines and regulates Downtown Lemon Grove's density, land use designation, development, design, circulation and growth. This General Plan Amendment GPA-180-0001 (in accordance with Chapter 18.40 of the Municipal Code) quadruples the size of Special Treatment Area (STA) 1, expands STA V (Automotive Sales District) and eliminates STA III (Regional Commercial). The DSP seeks to leverage development opportunities near the City's transit stations and energize the downtown. Goals related to economic development, place making and mobility also aim to improve the City's public spaces, parks and streets and attract land uses ideal for families and professionals. The Specific Plan includes a variety of zoning districts, each with its own vision and set of land use and design regulations intended to emphasize the character of existing downtown neighborhoods. A new Art District and a Historic District are proposed. Outdoor live music, events and activities will be a part. In many instances, the SP incorporates increased densities and intensities up to five stories high and up to 90 dwelling units/acre in areas currently zoned for two stories maximum and support a pedestrian oriented multi-modal circulation network to spur growth and development. Under the DSP, approximately 2,600 new dwelling units and 100 new acres in floor area of commercial, industrial, hotel and office space are anticipated at build out. These SP requirements supersede the requirements of the City's Zoning Ordinance in Title 17 of the Municipal Code. If there is a conflict between the regulations in the City's Municipal Code and the DSP, the regulations in the DSP shall prevail.

Location: Downtown Specific Plan Boundary, Lemon Grove, CA 91945.
Applicant: City of Lemon Grove, Development Services Department
Staff Assigned: Mike Viglione.

A Draft Mitigated Negative Declaration was prepared by the City of Lemon Grove Development Services Department for the project.

The following determinations have been made regarding the above described project:

1. The project will not have a significant effect on the environment.
2. A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures are proposed to be implemented as part of the project.
4. The project is not a designated hazardous waste facility, hazardous waste property or hazardous waste disposal site as specified under Section 65962.5 of the Government Code.

The draft Mitigated Negative Declaration, Initial Study, and supporting documents may be reviewed, or purchased for the cost of reproduction, at the Development Services Department, 3232 Main Street, Lemon Grove, CA 91945 or on the website (www.tinyurl.com/DVSPE).

For information regarding this project, contact Mike Viglione, Assistant Planner, at (619) 825-3812.

Written comments regarding the adequacy of this Draft Mitigated Negative Declaration must be received by the Development Services Department at the above address by April 14, 2018.

A final environmental report incorporating public input will then be prepared by the decision making authorities.

Signature (David De Vries, City of Lemon Grove)	March 15, 2018 Date	Development Services Director Title

A notice of the April 17, 2018 City Council hearing was published in the East County Californian and distributed to property owners within and within 500 feet of the downtown area on March 15, 2018.

Date received for filing at OPR: N/A

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Downtown Specific Plan

Lead Agency: City of Lemon Grove | Contact Person: David De Vries

Mailing Address: 3232 Main Street | Phone: 619-825-3807

City: Lemon Grove | Zip: 91945 | County: San Diego

Project Location: County: San Diego | City/Nearest Community: Lemon Grove

Cross Streets: Broadway & Lemon Grove Avenue | Zip Code: 91945

Longitude/Latitude (degrees, minutes and seconds): -117 ° 1 ' 50.35" N / 32 ° 44 ' 33.33" W | Total Acres: 219

Assessor's Parcel No.: Multiple | Section: | Twp.: | Range: | Base:

Within 2 Miles: State Hwy #: 94 & 125 | Waterways: 0

Airports: 0 | Railways: MTS Orange Line | Schools: 15

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other:

Development Type:

☒ Residential: Units 2,647 Acres
☒ Office: Sq.ft. Acres 43.8 Employees
☒ Commercial: Sq.ft. Acres 100 Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☐ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☐ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☐ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☐ Water Quality
☐ Water Supply/Groundwater
☐ Wetland/Riparian
☐ Growth Inducement
☐ Land Use
☐ Cumulative Effects
☒ Other: GHG; Tribal; Utility

Present Land Use/Zoning/General Plan Designation:

Retail Commercial, Commercial, General Business, Mixed Use, Transit Mixed Use-3, Transit Mixed Use-5, Transit Mixed Use-7, M

Project Description: *(please use a separate page if necessary)*

See attached.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____ Air Resources Board	_____ Office of Historic Preservation
_____ Boating & Waterways, Department of	_____ Office of Public School Construction
_____ California Emergency Management Agency	_____ Parks & Recreation, Department of
_____ California Highway Patrol	_____ Pesticide Regulation, Department of
_____ Caltrans District # _____	_____ Public Utilities Commission
_____ Caltrans Division of Aeronautics	_____ Regional WQCB # _____
_____ Caltrans Planning	_____ Resources Agency
_____ Central Valley Flood Protection Board	_____ Resources Recycling and Recovery, Department of
_____ Coachella Valley Mtns. Conservancy	_____ S.F. Bay Conservation & Development Comm.
_____ Coastal Commission	_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ Colorado River Board	_____ San Joaquin River Conservancy
_____ Conservation, Department of	_____ Santa Monica Mtns. Conservancy
_____ Corrections, Department of	_____ State Lands Commission
_____ Delta Protection Commission	_____ SWRCB: Clean Water Grants
_____ Education, Department of	_____ SWRCB: Water Quality
_____ Energy Commission	_____ SWRCB: Water Rights
_____ Fish & Game Region # _____	_____ Tahoe Regional Planning Agency
_____ Food & Agriculture, Department of	_____ Toxic Substances Control, Department of
_____ Forestry and Fire Protection, Department of	_____ Water Resources, Department of
_____ General Services, Department of	
_____ Health Services, Department of	_____ Other: _____
_____ Housing & Community Development	_____ Other: _____
_____ Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date 3/15/18 Ending Date 4/14/2018

Lead Agency (Complete if applicable):

Consulting Firm: Rick Engineering	Applicant: _____
Address: 5620 Friars Road	Address: _____
City/State/Zip: San Diego, CA 91945	City/State/Zip: _____
Contact: Danny Serrano	Phone: _____
Phone: 619-291-0707	

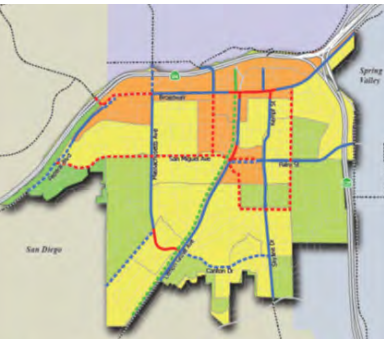
Signature of Lead Agency Representative: _____ Date: 3-18-18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Project Description

The 1996 Lemon Grove General Plan identified several Special Treatment Areas (STAs) within the City which warranted special planning attention due to unique neighborhood conditions and potential. The intersection of Broadway and Lemon Grove Avenue was identified as the traditional downtown commercial district and designated as STA I. In 2005, the City refined the STA I concept by adopting the Downtown Village Specific Plan (2005 DVSP) for the area which sought to stimulate a vibrant, transit oriented neighborhood for Downtown Lemon Grove. In 2015, the City Council expressed interest in exploring new opportunities and expanding the downtown plan. Consequently, the Downtown Specific Plan (DSP) is a comprehensive update and expansion of the City of Lemon Grove's 2005 Downtown Village Specific Plan.

The DSP includes an expansion of the specific plan area within City limits from Massachusetts Avenue to the west, Highway 94 to the north, Washington Street to the east and Lincoln Street to the south (approximate). The DSP area consists of approximately 219 acres, inclusive of the original DVSP boundaries. The DSP will serve as a regulatory document that defines and regulates Downtown Lemon Grove's density, land use designation, development, design, circulation and growth. This General Plan Amendment GPA-180-0001 quadruples the size of Special Treatment Area (STA) 1, expands STA V (Automotive Sales District) and eliminates STA III (Regional Commercial). The DSP seeks to leverage development opportunities near the City's transit stations and energize the downtown. Goals related to economic development, place making and mobility also aim to improve the City's public spaces, parks and streets and attract land uses ideal for families and professionals. The Specific Plan includes a variety of zoning districts, each with its own vision and set of land use and design regulations intended to emphasize the character of existing downtown neighborhoods. A new Art District and a Historic District are proposed. Outdoor live music, events and activities will be a part. In many instances, the Specific Plan incorporates increased densities and intensities up to five stories high and up to 90 dwelling units/acre in areas currently zoned for two stories maximum and support a pedestrian oriented multi-modal circulation network to spur growth and development. Under the DSP, approximately 3,000 new dwelling units and 160 new acres in floor area of commercial, industrial, hotel and office space are anticipated at build out. These Specific Plan requirements supersede the requirements of the City's Zoning Ordinance in Title 17 of the Municipal Code. If there is a conflict between the regulations in the City's Municipal Code and the DSP, the regulations in the DSP shall prevail.



DOWNTOWN LEMON GROVE SPECIFIC PLAN

MITIGATED NEGATIVE DECLARATION

CITY OF LEMON GROVE
BEST CLIMATE ON EARTH
CALIFORNIA

MARCH 2018

Table of Contents

I. Introduction

Introduction and Regulatory Guidance

This document is an Initial Study and Mitigated Negative Declaration (IS/MND) prepared pursuant to the California Environmental Quality Act (CEQA) for the proposed City of Lemon Grove Downtown Specific Plan Specific Plan project (hereafter referred to as "Specific Plan").

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, Section 15064, an Environmental Impact Report (EIR) must be prepared if the Initial Study indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and, therefore, why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

a) *The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the Specific Plan elements may have a significant effect on the environment, or*

b) *The Initial Study identifies potentially significant effects, but:*

   (1) *Specific Plan land use proposals and design elements made by or agreed to by the City of Lemon Grove before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*

   (2) *There is no substantial evidence, in light of the whole record before the agency, that the Specific Plan as proposed may have a significant effect on the environment.*

This document is a Mitigated Negative Declaration and incorporates all of the elements of an Initial Study. Hereafter this document is referred to as an IS/MND.

This IS/MND addresses project-specific impacts that were not fully addressed in the City's 1996 General Plan Master Environmental Impact Report (MEIR). This IS/MND hereby incorporates the MEIR by reference. The 1996 General Plan and MEIR received final approval by the City Council on October 22, 1996. As noted above, the MEIR is a Program EIR and the discussions of general issues included in the document are in some cases applicable to the Specific Plan area.

Lead Agency and Project Information

Project title:	City of Lemon Grove Downtown Specific Plan General Plan Amendment GPA-180-0001
Lead Agency name and address:	City of Lemon Grove 3232 Main Street Lemon Grove, California 91945
Contact Person and phone number:	David De Vries (619) 825-3812 ddevries@lemongrove.ca.gov
Project Location:	The Specific Plan encompasses 219 gross acres within the City of Lemon Grove boundaries. Specifically, The Specific Plan is located entirely within the City and generally bounded to the north by State Route 94, to the east by Washington Street, to the south by Lincoln Street, and to the west by Massachusetts Street
Project sponsor's name and address:	City of Lemon Grove Development Services Department 3232 Main Street Lemon Grove, California 91945
General Plan Designation:	Retail Commercial, Commercial, General Business, Mixed Use, Transit Mixed Use-3, Transit Mixed Use-5, Transit Mixed Use-7, Medium High Density Residential, Village Commercial 3, Village Commercial 5, Civic, Retail Manufacturing, Schools/Institutional.
Zoning:	Residential Low Medium, Residential Medium High, Residential Professional, Commercial, General Commercial, Heavy Commercial, GC-HC, Central Commercial, Village Commercial 3, Village Commercial 5, Transit Mixed Use 3, Transit Mixed Use 5, Transit Mixed Use 5, Civic, Retail Manufacturing.
Special Treatment Area:	Special Treatment Area 1 – Downtown Village Specific Plan, Special Treatment Area 3 – Regional Commercial, Special Treatment Area 5 – Federal Boulevard Automotive Sales District.

Project Background:
The development of this Specific Plan, builds upon a series of previous planning efforts. In 2005, the City adopted the Downtown Village Specific Plan (2005 DVSP) which is synonymous with Special Treatment Area (STA) I. In 2015, the City Council expressed interest in exploring new opportunities downtown and expanding the downtown plan. This Specific Plan area is approximately four times larger than the 2005 DVSP and will become the expanded STA I area. A key goal of updating the 2005 DVSP and incorporating the larger area for the Specific Plan is to leverage development opportunities near the City's transit stations and to achieve goals related to economic development, place making and mobility that improve the City's public spaces and attract land uses that are ideal for families and professionals.

The Specific Plan study area is located centrally within the City, which is regionally accessed by State Highway 94 see **Figure 1 (Site Location Map)**, **Figure 2 (Vicinity Map), and Figure 3 (Specific Plan Boundary)**. Aside from STA 1, the Specific Plan area also encompasses STA III (Regional Commercial), and STA V (Automotive Sales District). The STAs, the Specific Plan boundary, and the Downtown Village Specific Plan Expansion (DVSPE) study area are shown on **Figure 4 (DVSPE Study Area, Special Treatment Areas, and Specific Plan).**

Prior to the preparation of the Specific Plan, the City helped prepare the Baseline Opportunities and Constraints Report (April 2017), to assist in drafting and developing an updated Specific Plan. This report includes a discussion of seven topics, along with the existing regulatory scheme and site conditions of each. Also included is an opportunities and constraints analysis posed by the regulations and site conditions, which was utilized to develop recommendations that the City could use in developing Specific Plan Policies.

The City's public outreach process has ensured that the community has a voice in the decision-making process. The public outreach process included:

- A project webpage
- A social media campaign
- Community group meetings
- Five pop-up events throughout the City
- Door-to-door canvassing downtown sharing flyers with business owners
- Bilingual project flyers distributed in places of interest and posted in City facilities
- Property owner notifications
- E-notifications to stakeholders
- Two media advisories and articles in the *San Diego Union Tribune* and *The Grove Gazette*
- School District assisted all-calls to parents
- Business Owner Survey
- Property Owner and Stakeholder Survey
- Two community workshops and one City Council workshop

Surrounding land uses and setting:
In general, the Specific Plan is surrounded by urban development, with residential and commercial land uses to the east, south and west. State Route 94 provides the northern boundary of the Specific Plan.

Other public agencies whose approval is required:

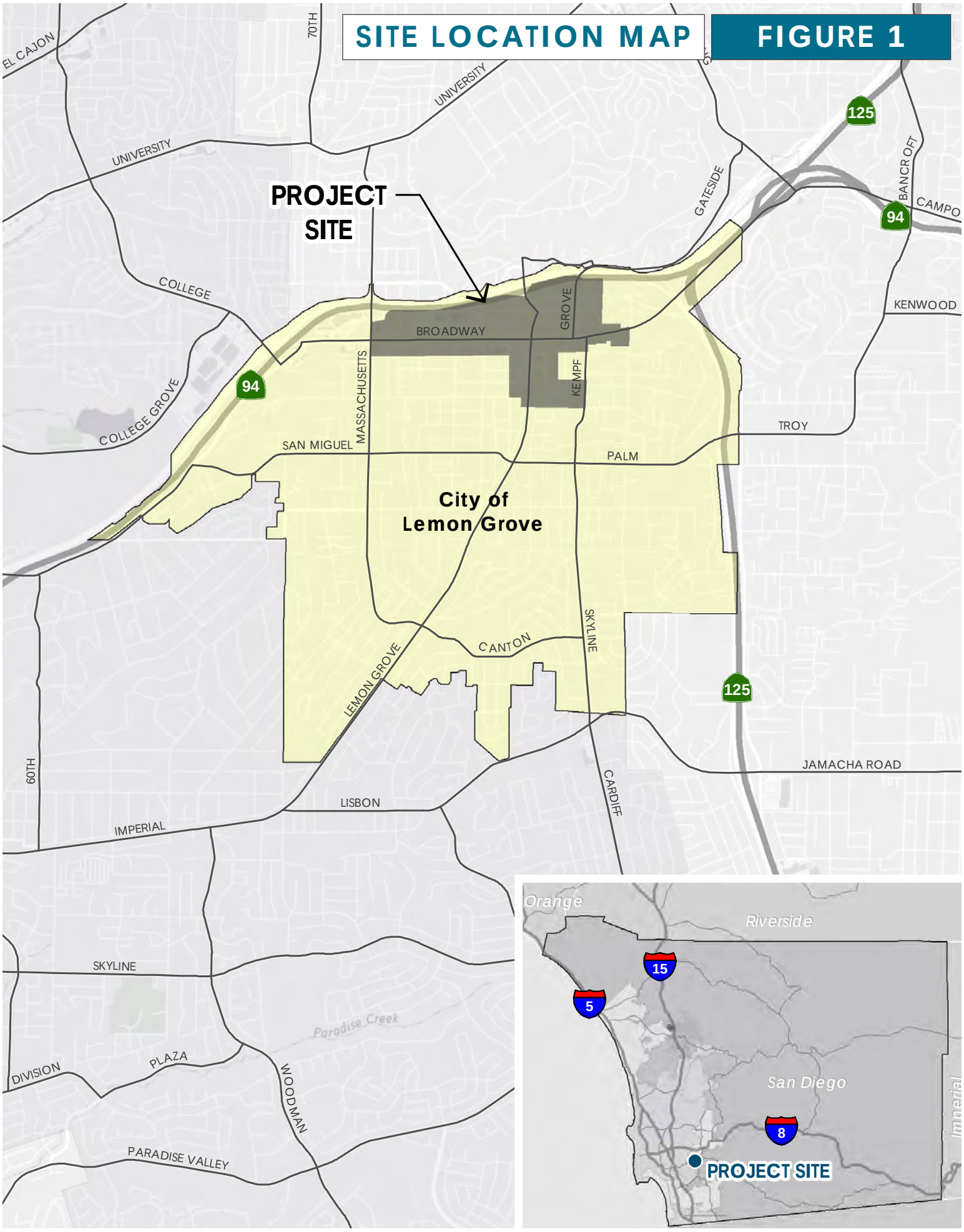
This IS/MND covers all approvals by government agencies that may be needed to approve and implement the proposed Specific Plan. The City of Lemon Grove is the lead agency with responsibility for approving the proposed project, which includes adoption of the Specific Plan. While the Specific Plan does not propose any site-specific developments, any future development implemented within the Specific Plan area may be required to seek approval by the Army Corps of Engineers, the United States Fish and Wildlife Service, and/or the California Department of Fish and Wildlife. In addition, all development implemented under the Specific Plan would require City approval, and at the appropriate time, the City will determine if any other permits are necessary.

Tribal Cultural Resources:

AB 52 and SB 18: Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans, such as this project. Pursuant to Public Resource Code (PRC) Section 21080.3.1., notification to the Identified Tribes was mailed via US mail on May 8, 2017 in compliance with State Requirements. The City was contacted and has met with interested Tribes that requested consultation.

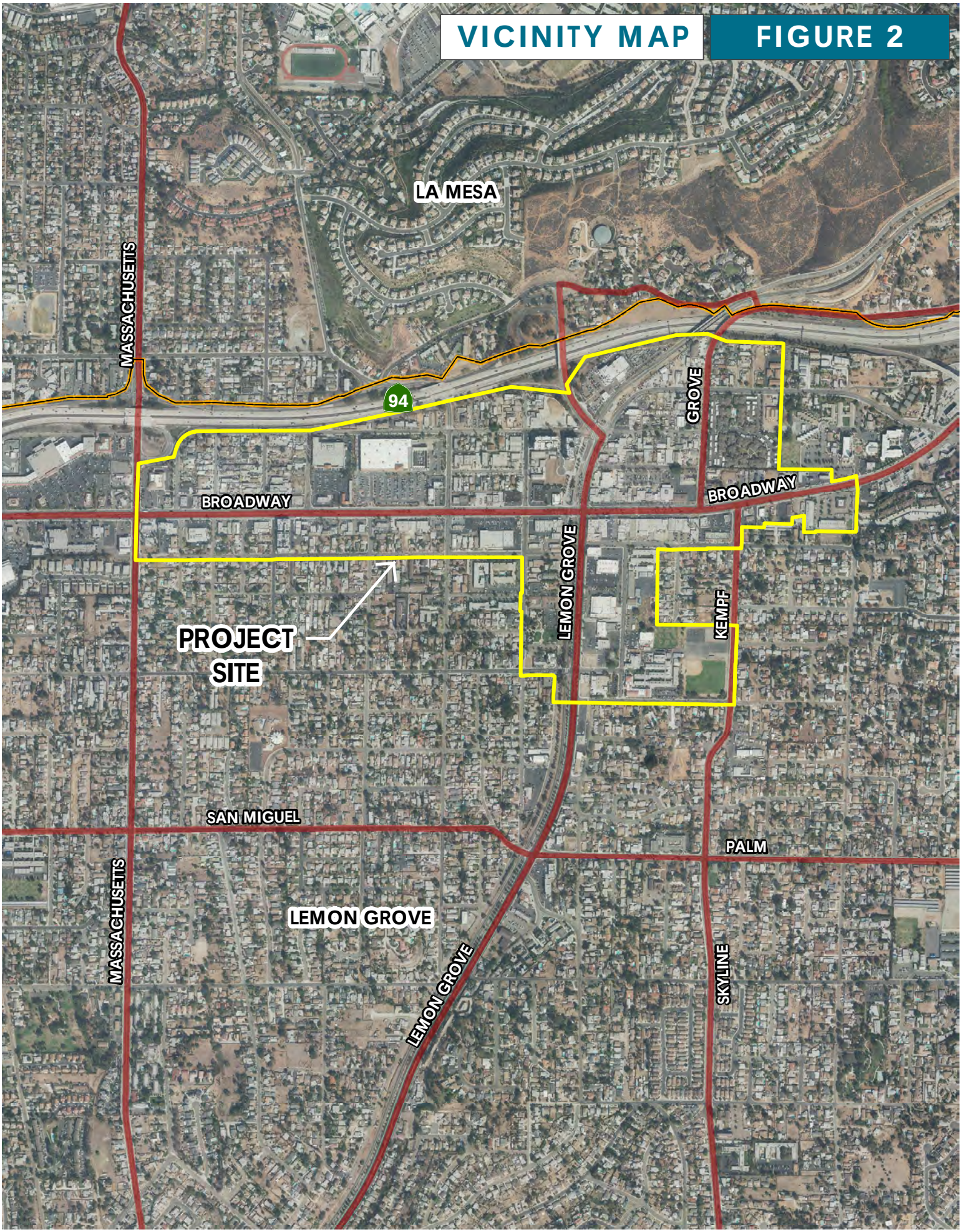
SITE LOCATION MAP

FIGURE 1



VICINITY MAP

FIGURE 2

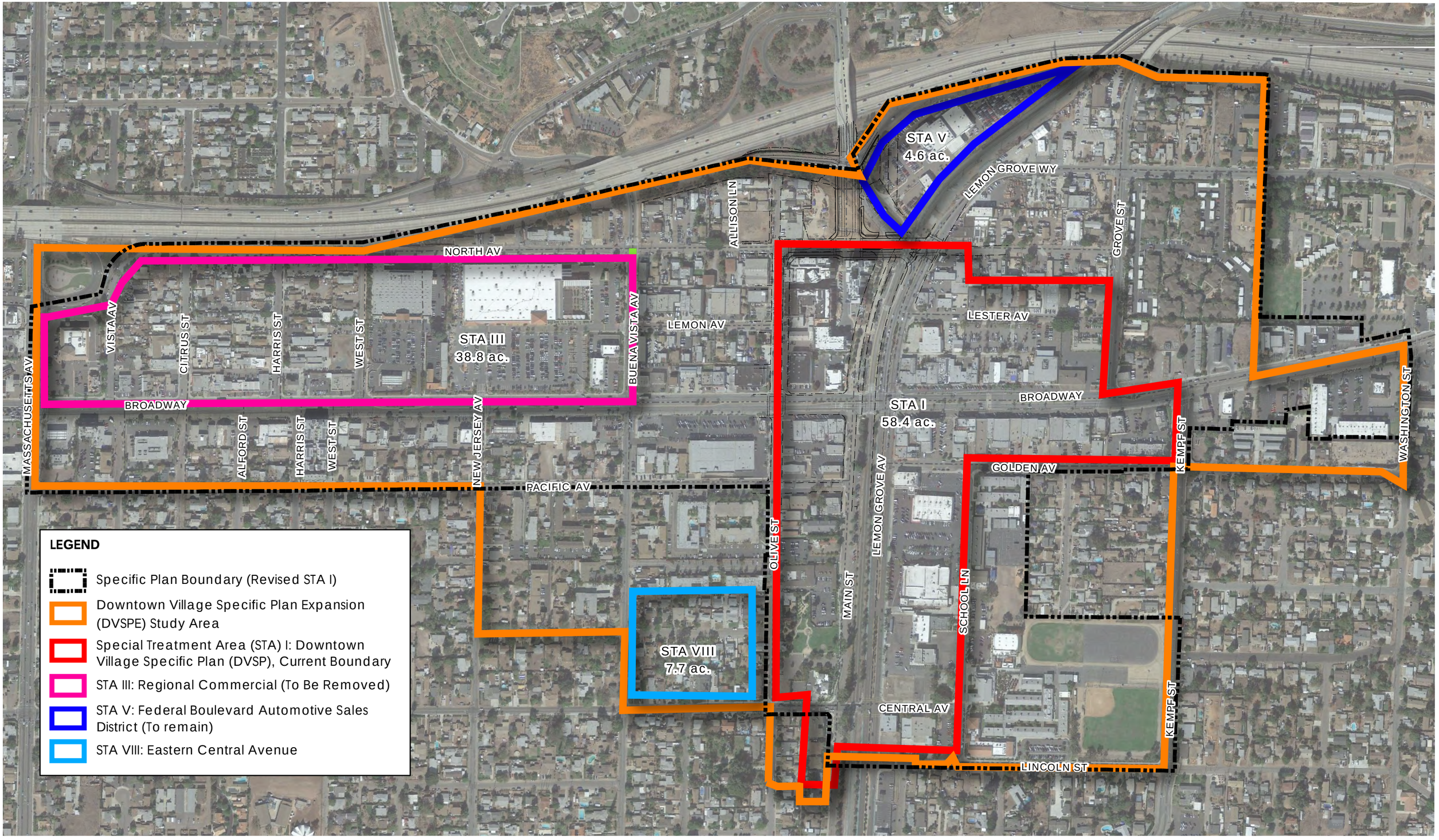


SPECIFIC PLAN BOUNDARY

FIGURE 3

DVSPE STUDY AREA, SPECIAL TREATMENT AREAS, & SPECIFIC PLAN

FIGURE 4



II. Project Description

Specific Plan Overview

This Specific Plan is the primary document governing land use decisions, regulating development and design, guiding improvement of the area's physical and economic environment, and establishing the City's goals and expectations for downtown development. The Specific Plan provides a land use framework for the downtown area of the City that will preserve the downtown's unique small town character and ensure its future economic viability. This framework includes the community's vision for the plan area – regulations, guidelines, and recommendations – that support the vision, and an implementation component that will facilitate the completion of the plan's key objectives. The Specific Plan provides a policy and regulatory bridge between the City of Lemon Grove General Plan (General Plan) and individual, project-level development. The City will use the Specific Plan as part of the project review and evaluation process. Once adopted, the Specific Plan's regulations for zoning, development standards, and design standards will provide the legal development standards for the Specific Plan area. The Specific Plan contains six chapters as follows:

Chapter 1.0 Introduction: Provides a broad overview of the plan and the process that went into creating the plan.

Chapter 2.0 Existing Conditions: Provides information on the existing conditions within the Specific Plan area, including the regulatory, physical, demographic, and economic environment. Identifies various opportunities and constraints that created the planning framework.

Chapter 3.0 Vision: Identifies overall goals and implementation programs which establish the "framework" for the land use plan, development standards, design guidelines, streetscape plan, and implementation mechanisms.

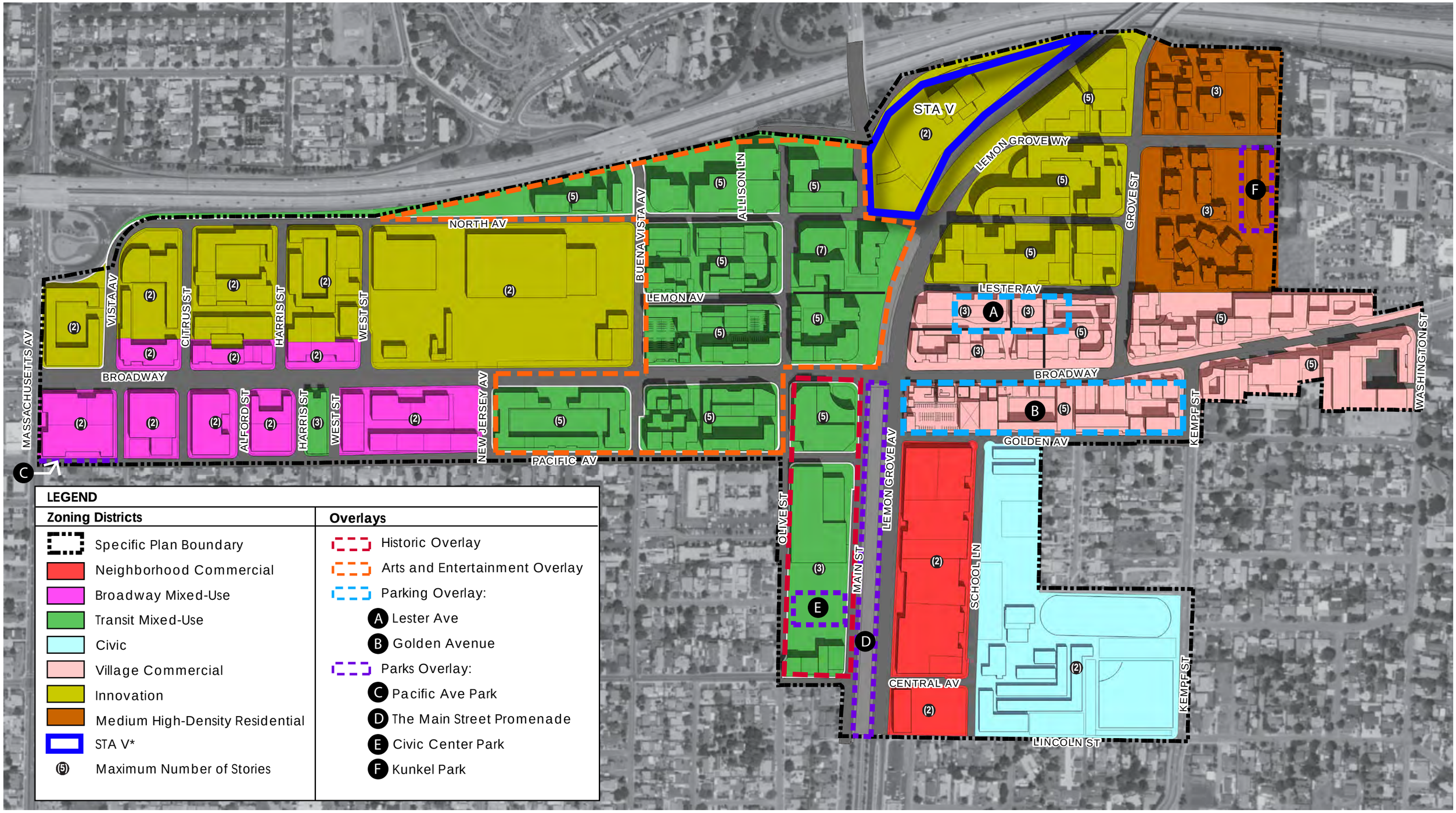
Chapter 4.0 Land Use Plan: Translates framework goals and implementing actions into specific land use plans and associated development and design standards.

Chapter 5.0 Mobility: Provides design standards for streetscape improvements within the primary public rights-of-way.

Chapter 6.0 Implementation and Administration: Provides a summary of recommended public improvements and programs and implementation tools and strategies.

Seven Planning Areas, seven Zoning Districts, four types of overlays and a multi-modal circulation network are included in the Specific Plan in order to implement its vision. Existing land use designations within the Specific Plan area would be changed to the following designations: Neighborhood Commercial Zoning District, Broadway Mixed-Use Zoning District, Transit Mixed Use Zoning District, Civic Zoning District, Village Commercial Zoning District, Innovation Zoning District, and/or Medium Density/High Density Residential Zoning District. The proposed land use map is illustrated in **Figure 5**

ZONING MAP FIGURE 5



*STA V is a part of the Innovation Zoning District.

(Zoning Map) and would allow for 2,647 residential units and 6,267,410 square feet of non-residential uses.

As previously mentioned, a key goal of preparing the Specific Plan is to leverage development opportunities near the City's transit stations and to achieve goals related to economic development, place making and mobility that improve the City's public spaces and attract land uses that are ideal for families and professionals. Therefore, the highest intensities/densities are included in the Village Commercial, Innovation, and Transit Mixed-Use Zoning Districts and generally located within approximately ¼ mile from the trolley station at the intersection of Lemon Grove Avenue and Broadway.

The Specific Plan identifies the land uses that will be allowed, as outlined in Table 1 (Allowable Land Use Matrix) below:

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
ADMINISTRATIVE AND PROFESSIONAL OFFICES								
Retail Offices (retail service professional oriented offices such as, accounting, engineering, real estate and medicine)	P	P	P	P	P			
Employment Offices (non-retail offices for education, government, contractors, corporations, research and development and similar uses)	P	Z[5]	Z[5]		P		M	
Financial Institutions (bank, stock broker)	P	P	P	P	P			
Alternative Financial Services (pawn shops, cash for goods, payday loans, anticipatory loans, and								

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
EATING/DRINKING ESTABLISHMENTS								
Restaurants	P	P	P	P	P			Ch. 18.27
Bars/Nightclubs	C	C	C		C			Ch. 18.27
Brewpubs/Wine bars	Z	Z	Z	Z	Z			Ch. 1827
INDUSTRIAL & WAREHOUSING ESTABLISHMENTS								
Heavy Manufacturing (Uses that process, fabricate, assemble, treat, or package finished parts or products in compliance with Performance Standards; A retail component is permitted)		C			M			Section 17.24.080
Light Manufacturing (Uses that process, fabricate, assemble, treat, or package finished parts or products in compliance with Performance Standards; A retail component is required)	Z	Z	Z	Z	Z			Section 17.24.080
Personal Self Storage Facilities								
Public Utility Facilities	M	M	M	M	M	M	M	Section 17.24.080
Recycling Collection Facilities								Section 17.24.080
Recycling/Garbage Processing Facilities								Section 17.24.080
Vehicle Repair and Restoration		M[2]			Z			Section 17.24.080
Warehousing		M[2]			Z			Section 17.24.080
Wholesale Trade		M[2]			Z			
RETAIL SALES AND SERVICES								
Adult Entertainment								Ch. 18.28
Animal Sales & Service	M	M	M	M	M			Ch. 18.16 and Section 17.24.080

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
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T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Auditoriums/Conference/Meeting/ Entertainment/Recreation Facilities (Indoor)	M	M	M	M	M		M	Section 17.24.080
Auditorium/Entertainment/Recreation Facilities (Outdoor)	C	C	C		C		C	Section 17.24.080
Business Support (Uses that provide printing, copying, photographic, computer, or technological services)	P	P	P	P	P			
Day Care Center	M			M	M			
Equipment Rental					M			
Funeral & Mortuary Services (without crematoria)	M				M			
General Merchandise (such as grocery, bakery, sporting goods, building supply, antiques, hobby, art, clothing, flowers)	P	P	P	P	P			
Hotel (interior access to rooms)	M	M	M		M			
Hookah Smoking Lounges		C						
Kiosk, Stands & Carts – Outdoors		Z	Z					Section 17.24.060
Maintenance and Repair of Consumer Goods	Z	Z	Z	Z	Z			
Marijuana Dispensaries								Ch. 17.32
Liquor Stores	C							Ch. 18.27
In- or Outdoor Nursery (retail only)	M			M	M			
Personal Services (such as barber, beauty, professional massage/day spa, tanning, tailor, travel)	P	P	P	P	P			
Professional Studios & Galleries (such as art, dance, martial arts, music, writing, educational tutoring and instructional services)	P	P	P	P	P			
Retail – Antiques (High value collectibles produced fifty years before date of purchase)	P	P	P	P	P			
Retail – Second Hand Merchandise		M			M			

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Smoke Shops								
Tattoo and Body Piercing Studios		P[2]						
Theatre and Movie Theater (indoor)	M	M	M	M	M			
Theatre and Movie Theater (outdoor)		C	C					
Vehicle Equipment and Supplies without Installation	P	P		P	P			
Vehicle Fuel Station and Maintenance	C	C		C	C			Section 17.24.080
Vehicle Sales and Rentals	M	M		M	M			Section 17.24.080
PUBLIC FACILITIES								
Library/Museum	M	M	M	M	M		M	
Parks/Community Gardens/Recreation	P	P	P	P	P	P	P	
Parking Lot or Structure	P	C	C	P	P	P	P	Section 17.24.060
Places of Worship (includes accessory schools, preschools, daycares, and recreation facilities)		C				C	C	
Public Safety Facilities	P	P	P	P	P	P	P	
Schools K-12 (Private or Public)							C	
Colleges and Universities		C			C		C	
RESIDENTIAL								
Emergency Homeless Shelters								
Multi-Family Housing	M[5,7]	M[4,7]	M[5,7]			C		
Residential Care Facilities								
ACCESSORY USES (less than 50% of floor area)								
Assembly Space	Z	M	M	Z	Z	Z	Z	Section 17.24.060
Loading & Unloading On-site	Z	Z	Z	Z	Z		Z	
Alcohol Sales and Consumption[6]	*	*	*	*	*			Ch. 18.28
Employee Convenience & Services	Z	Z	Z	Z	Z		Z	Section 17.24.060
Outdoor Dining	Z	Z	Z	Z	Z		Z	Section 17.24.060

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LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Outdoor Display	Z	Z	Z	Z	Z			Section 17.24.060
Outdoor Sales (outside a retail storefront; includes walk up windows)	M	M	M	M	M			Section 17.24.060
Outdoor Storage of Equipment & Supplies		M			M			Section 17.24.060
Outdoor Storage of Vehicles (well maintained)	M	M[2]		M	M			Section 17.24.060
Outdoor Vending Machines (adjacent to storefront)	Z	Z	Z	Z	Z			
Recycling/Donation Collection Facilities	C				C			
Recreational & Large Vehicle Storage					M			
Retail – Second Hand Merchandise		M			M			
Retail Manufacturing	Z	Z	Z	Z	Z			Section 17.24.060 and 17.24.080
Caretaker's Dwelling		M			M			Section 17.24.060
Catering (on or off-site)	Z	Z	Z	Z	Z			
Outdoor Entertainment & Live Music	C	C	C	C	C		C	
Indoor Entertainment & Live Music	Z	Z	Z	Z	Z		M	Sections 9.24.080(B) and 17.24.080
Parks, Open Space & Recreation	P	P	P	P	P	P	P	
Art (Murals, Sculptures, etc.)	Z	Z	Z	Z	Z	Z	Z	
Home Occupations[8]	Z	Z	Z	Z	Z	Z	Z	Chapter 18.20
Small Family Daycare	P	P	P			P		Section 17.24.060
Large Family Daycare						M		Section 17.24.060
Community Gardens/Agriculture	Z	Z	Z	Z	Z	Z	Z	Section 17.24.060 and 17.24.080
Communications	Z	Z	Z	Z	Z	Z	Z	Section 17.24.060 and 17.24.080
Vehicle Charging Stations	P	P	P	P	P	P	P	
Car and Ride Share Parking Spaces	P	P	P	P	P	P	P	
Heliport (rooftop)		M			M			

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* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Residential Complex Support	Z	Z	Z			Z		Section 17.24.060
Recycling, Composting, and Trash receptacles	Z	Z	Z	Z	Z	Z	Z	
Bike and Skateboard Lockers and Storage Facilities	M	M	M	M	M	M	M	
Warehousing		M[2]			Z			
Wholesale Trade		M[2]			Z			
Drive Through with retail adjacent to public sidewalks	M	C	C	C	C			
TEMPORARY USES								
Mobile Food Trucks		T	T	T				
Booths and Canopies	T	T	T	T	T	T	T	
Farmer's, Artisan, Craftsman Markets/Displays		T	T	T	T		T	
Construction staging and laydown with trailer – On or Off-site	T	T	T	T	T	T	T	Section 17.24.060
Loading and Unloading in Public Alley	T	T	T	T	T			
Christmas Tree/Pumpkin Patch Sales	T	T	T	T	T		T	
Outdoor Entertainment	T	T	T	T	T		T	
Outdoor Alcohol Sales & Consumption	T	T	T	T	T		T	Chapter 18.27

1 Land uses are required to be indoors unless allowed as an outdoor accessory use or otherwise noted in this table.
2 Permitted in Art and Entertainment Overlay District Only.
3 Permitted in Historic Overlay District Only.
4 Use may include a retail element on the ground floor. See the development standards for further details.
5 Above ground floor only.
6 As prescribed in the referenced Municipal Code Section.
7 Multi-family subdivision projects greater than five units require a Tentative Map and Planning Commission City Council approval.
8 Nonconforming single-family residences are exempt from Section 18.20.030 (I,J,Q,R,S,T, and U).

III. Environmental Checklist

Introduction

This section provides an evaluation of the potential environmental impacts of the proposed project, including the California Environmental Quality Act (CEQA) Mandatory Findings of Significance. There are 18 specific environmental issues evaluated in this chapter, in addition to the Mandatory Findings of Significance. The environmental issues evaluated in this chapter include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Circulation
- Tribal Cultural Resources
- Utilities and Service Systems
- Mandatory Findings of Significance

For each issue area, one of four conclusions is made:

•**No Impact**: No project-related impact to the environment would occur with project development;
•**Less than Significant Impact**: The proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures;
• **Less than Significant Impact with Mitigation Incorporation**: The proposed project would result in an environmental impact or effect that is potentially significant, but the incorporation of mitigation measure(s) would reduce the project-related impact to a less than significant level; or,
• **Potentially Significant Impact**: The proposed project would result in an environmental impact or effect that is potentially significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Environmental Checklist

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The project could potentially result in one or more of the following environmental effects:

☐ Aesthetics
☐ Agricultural Resources
☒ Air Quality
☐ Biological Resources
☒ Cultural Resources
☒ Geology & Soils
☒ Greenhouse Gas Emissions
☒ Hazards & Hazardous Materials
☐ Hydrology &Water Quality
☐ Land Use Planning
☐ Mineral Resources
☒ Noise
☐ Population & Housing
☒ Public Services
☒ Recreation
☒ Transportation/Circulation
☒ Tribal Cultural Resources
☒ Utilities and Service Systems
☒ Mandatory Findings of Significance

PURPOSE OF THIS INTIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063 to determine if the Specific Plan, as proposed, may have a significant effect upon the environment. This document incorporates both an Initial Study (IS) and a Mitigated Negative Declaration (MND). The discussion below demonstrates that there are no potentially significant impacts identified that cannot be mitigated to a less than significant level or impacts that have not been fully addressed under a previous environmental document. Therefore, an Environmental Impact Report (EIR) is not warranted.

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used for individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to an infill project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Aesthetics – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion of Impacts

a) **Response** (Sources: Site Visit; GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. The subject area is located within a developed urban area and is not located in a scenic vista area that would be affected by the proposed project. Therefore, the impact will be **less than significant.**

b) **Response** (Source: CALTRANS Scenic Highway Program)

No Impact. There are no state scenic highways located within the Specific Plan area, resulting in **no impact**.

c) **Response** (Source: General Plan, Community Development Element, 2017 Lemon Grove DVSPE Baseline Report)

Less than Significant Impact. The proposed project area is already developed for urban uses. Implementation of the proposed Specific Plan would encourage new development activities that could enhance the visual character. Any impacts to the scenic character of the project area would not be greater than those impacts previously addressed in the GP MEIR, and it is anticipated that any alterations to the existing visual character of the project area would be improvements that would increase the scenic value of the development within the Specific Plan area. Since all development completed pursuant to the Specific Plan would be required to follow the development and design standards identified within the Specific Plan, implementation of the Specific Plan would not substantially degrade the existing visual character or quality of the site and its surroundings, resulting in **less than significant** impacts.

d) **Response** (Sources: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. The Specific Plan area is fully urbanized and is surrounded substantially by urban development. Although the Specific Plan could result in future development and revitalization of the project area that might introduce new sources of daytime glare and change levels of nighttime lighting and illumination, these impacts are likely to be minimal considering the existing development of the area. Further, the Specific Plan itself does not propose any site specific developments. All future development within the project area would be subject to the Specific Plan development and design standards pertaining to landscaping, lighting, and the use of appropriate building materials which will reduce any substantial light or glare. Therefore, the proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, resulting in **less than significant** impacts.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2) Agriculture and Forestry Resources – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Source: San Diego County Important Farmland 2014, Farmland Mapping and Monitoring Program)

No Impact. According to the Farmland Mapping and Monitoring Program, San Diego Important Farmland Maps, the City of Lemon Grove is entirely within land classified as "Urban and Built-Up Land," and is outside of any lands identified as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Importance." Therefore, the proposed project would not convert Prime Farmland,

Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, resulting in **no impact**.

b) Response (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There are no Williamson Act Contract lands or areas zoned for agricultural use within the Specific Plan area. Therefore, the proposed project will not conflict with existing zoning for agricultural use or a Williamson Act Contract, resulting in **no impact**.

c) Response (Sources: Lemon Grove Municipal Code Chapter 17.16 – Zoning Districts; Lemon Grove Zoning Map)

No Impact. The Lemon Grove Municipal Code Chapter 17.16 and the Lemon Grove Zoning Map do not contain any zoning designations for forest land within the Specific Plan area, nor is the Specific Plan area located within forest land, timberland or timberland zoned for Timberland Production. Therefore, the Specific Plan will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, resulting in **no impact**.

d) Response (Source: Site Visit)

No Impact. The Specific Plan area is not located within forest land and contains no areas that could be used for timberland production. Therefore, the proposed project will not result in the loss of forest land or conversion of forest land to non-forest use, resulting in **no impact**.

e) Response (Sources: Site Visit)

No Impact. There is no farmland or forest land within the Specific Plan area, based on observations made during a site visit. Therefore, the proposed project will not involve changes in the existing environment which could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
3) Air Quality – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion of Impacts

a - c) Response (Sources: GP MEIR; Lemon Grove 2005 DVSP MND, 2017 Lemon Grove DVSPE Baseline Report, Lemon Grove Bikeway Master Plan Update)

Less Than Significant Impact with Mitigation Incorporated. The proposed project will have a significant impact to air quality if it will:

- Exceed any federal, state, or local ambient air quality standard;
- Exceed Air Pollution Control District air quality significance thresholds;
- Substantially contribute to an existing or projected air quality violation; or
- Conflict with the Regional Air Quality Strategy (RAQS) or SANDAG Growth Management Plan.

As discussed in the RAQS, the San Diego Air Basin, which includes Lemon Grove, currently exceeds the federal and state air quality standards for ozone and state standards for particulates. Because the San Diego Air Basin is already impacted, any new development in the San Diego Air Basin will compound existing problems and have a significant impact on regional air quality by creating more emissions.

Any new development within Lemon Grove will create short-term air emissions related to construction and long-term air emissions related primarily to increased vehicular use. However, the proposed Specific Plan, which designates a mix of retail, office and residential uses in the Specific

Plan area within walking distance of the Trolley station and bus stops, implements some of the primary RAQS tactics aimed at reducing air emissions by encouraging people to rely on mass transit rather than the automobile. Therefore, while the increased intensity/density resulting from proposed mixed-use development in the Specific Plan area will increase air emissions, the proximity of the development to the trolley station will promote the community's efforts to reduce driving and traffic that may contribute to existing or projected air quality violations.

Mitigation Measures

AQ-1: The City shall implement the Conservation and Recreation Element policies (8.1 – 8.5) for improved local and regional air quality in addition to renewing community livability. Implementation of the Specific Plan will allow the City to strive toward a development pattern that allows people to use transit, walk or bicycle to activity centers, such as the Downtown Village, Civic Center, shopping areas, schools, parks and employment areas.

AQ-2: The City shall improve local roads according to the Specific Plan as needed to maintain efficient traffic flow.

AQ-3: The City shall continue the implementation of the Lemon Grove Bikeway Master Plan Update to help improve regional air quality in addition to improving bicycle safety.

AQ-4: The City shall encourage local establishment of new businesses through by-right zoning offering high-quality jobs to allow residents to work locally and avoid excessive commutes.

AQ-5: The City shall review development proposals for potential construction and operation air quality impacts pursuant to the California Environmental Quality Act (CEQA) and the Regional Air Quality Strategy (RAQS) and evaluate compliance with regional clean air planning objectives. The City shall require the use of available technology, best management practices and land use and transportation planning techniques, as appropriate, including:

- Dust and vehicle emission control during construction;
- Incorporation of transit stops;
- Pedestrian and bicycle access and facilities, and linkages to other activity and transit centers;
- Traffic flow improvements; and/or
- Energy efficient equipment, site design and construction.

AQ-6: The City shall ensure development proposals include identification of asbestos and hazardous materials and require conformance with all applicable regulations for removal and containment of asbestos. City staff reviews the age of buildings to determine and mitigate potential environmental hazards.

AQ-7: The City shall ensure that all commercial and industrial operations in the City obtain all appropriate permits from the San Diego Air Pollution Control District. The City shall require documentation of necessary permits prior to issuing business permits.

AQ-8: The City shall participate in regional air quality planning and implement regional plans such as the Regional Air Quality Strategy and the Regional Growth Management Strategy in Lemon Grove. To ensure that new regional programs can be feasibly implemented and enforced by the local cities, the City shall participate in regional air quality planning processes.

AQ-9: The City shall undertake an aggressive program to encourage Lemon Grove commuters to utilize alternative transportation modes. The City shall publicize transit services including the location of transit centers and park-and-ride lots in the City newsletter and at public facilities. The City shall provide transit information at Lemon Grove City Hall for the purposes of displaying and distribution of transit maps and schedules, bike route maps and carpool promotional materials.

AQ-10: The City shall continue to support and participate in regional transportation planning programs through SANDAG committee representation and planning coordination with adjacent jurisdictions.

Significance Finding

The Specific Plan is within the scope of the General Plan. The General Plan MEIR includes analysis of the Downtown Specific Plan area and, therefore, this section of the Mitigated Negative Declaration has been tiered from the MEIR certified on October 22, 1996 by the City of Lemon Grove City Council. The MEIR concluded that only air quality impacts could not be fully mitigated. The General Plan Findings of Fact which includes a Statement of Overriding Considerations concludes that, "Because air pollutants in the San Diego Air Basin exceed some of the federal and state standards, any new development creates significant, unavoidable air quality impacts. The City of Lemon Grove is committed to implementing strategies to improve regional air quality, and must balance environmental considerations with community development and the long-term stability of the City." With implementation of the Specific Plan and associated mitigation measures identified above, impacts related to air quality will be substantially reduced. The Specific Plan creates a land use and mobility program that focuses on Transit Oriented Development and is designed to create a pedestrian neighborhood that will utilize transit and minimize air quality and greenhouse gas impacts, thus resulting in **less than significant impact with mitigation incorporated**.

d) Response (Source: GP MEIR; Lemon Grove 2005 DVSP MND, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated. The proposed project is located near proposed and existing residential developments and schools. However, the Specific Plan is designed to be pedestrian and bicycle friendly minimizing any impacts to the existing residential neighborhood and school site.

Significance Finding

With implementation of the mitigation measures **AQ-1** to **AQ-10** identified above, impacts related to air quality will be reduced to **less than significant** levels.

e) Response (Source: GP MEIR; Lemon Grove 2005 MND)

Less Than Significant Impact. Except for temporary construction with required best management practices related emissions, the proposed project would not create objectionable odors.

Significance Finding

With implementation of the mitigation measures identified above (**AQ-1** to **AQ-10**), impacts related to air quality will be reduced to **less than significant** levels.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
4) Biological Resources – Would the Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Specific Plan area is located in an area that is already developed for urban uses and will have no substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife. Therefore, there will be **no impact**.

b) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Specific Plan area consists of urbanized, developed, and disturbed land due to human activity. The Specific Plan area will have no substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife. Therefore, there will be no impact.

c) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There are no jurisdictional wetlands within the Specific Plan area. Therefore, the proposed project would not remove, fill, interrupt or otherwise substantially affect a federally protected wetland, resulting in no impact.

d) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report; Lemon Grove 2005 DVSP MND; County of San Diego South County Multiple Species Habitat Conservation Plan, South County MSCP)

No Impact. The Specific Plan area consists of urbanized, developed, and disturbed land due to human activity and is not located within any core biological resource areas and associated habitat linkages, as identified by the South County MSCP. Therefore, the proposed project would not interfere substantially with the movement of any native or migratory species or established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, resulting in **no impact**.

e) Response (Sources: Lemon Grove Municipal Code)

No Impact. The proposed project site does not conflict with any ordinances or local policy protecting biological resources. Therefore, there will be no impact.

f) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report; County of San Diego South County Multiple Species Habitat Conservation Plan, South County MSCP)

No Impact. The Specific Plan area consists of urbanized, developed, and disturbed land due to human activity and is not located within any core biological resource areas and associated habitat linkages, as identified by the South County MSCP. Therefore, the proposed project would not conflict with the provisions of the South County MSCP, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
5) Cultural Resources – Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated. The Cultural Resources Report (1995) used in the 1996 MEIR identified four (4) properties located within the Specific Plan area that are listed in the Historic Properties Data File for San Diego County. These four locations are located at: 3185 Olive Street (Atherton Chapel); 3308 Main Street (the Sonka Store); 3205 Olive Street (H. Lee House); and 3262 Main Street (Ebon McGregor House). Of these four properties, only the H. Lee House at 3205 Olive Street is eligible for National Register Status and is a State registered landmark.

An updated list of historical sites within the City of Lemon Grove has been provided by the Lemon Grove Historical Society, of which an additional three (3) historical sites were identified within the Specific Plan area. These sites are located at: 3100/3185 Main Street (First Congregational Church of Lemon Grove); 7387 Broadway (Conrad Mortuary); and 3232/3240 Main Street (Lemon Grove City Hall).

There are four (4) identified historic cultural resource locations within the Specific Plan area. These four locations are: the Big Lemon, at the southeast corner of Broadway and Main Street; the trolley station, at the Lemon Grove Trolley Depot; the Lemon Grove Library, located at 3001 School Lane; and the History Mural, located at 3308 Main Street.

Future infill development could indirectly cause a substantial adverse change in the significance of these historic resources through adjacent site demolition, modification, or alteration.

Mitigation Measure

CR-1: Prior to demolition or remodeling of any building 50 years or older, under the supervision of a qualified historian and with the assistance of the Lemon Grove Historical Society, the City shall conduct a

survey to identify significant historic and architectural resources. The survey shall include evaluating the significance according to the National Register of Historic Places criteria and the California Environmental Quality Act Guidelines. Historic resources identified by the Historical Society as having significance to the City's heritage shall also be identified based on carefully defined criteria. Redevelopment of such sites shall require a public hearing through a planned development permit and compliance with the adopted California Historical Building Code.

Significance Finding

The Specific Plan proposes both a Historic Overlay Zone and a Community History Planning Area which encompass all identified historic resources except Conrad's mortuary in order to preserve, restore, and maintain the historic elements of Lemon Grove which in conjunction with the implementation of the mitigation measure identified above, impacts would be reduced to less **than significant** levels.

b) Response (Sources: Lemon Grove 2005 SP MND)

Less Than Significant Impact with Mitigation Incorporated. The Specific Plan area is currently developed for urban uses; however, subsurface archaeological resources may still be present. Therefore, the proposed project could cause a substantial adverse change in the significance of an archeological resource, resulting in a potentially significant impact prior to mitigation.

Mitigation Measures

CR-2: Cultural and Paleontological Resource Monitoring shall be required during any ground disturbing activities, including grading operations, for any new development or redevelopment projects within the Specific Plan area.

Significance Finding

There have been no identified significant prehistoric cultural resources identified within the Specific Plan study area; however, monitoring will be required to assure there are no inadvertent impacts to unidentified resources.

c) Response (Sources: Lemon Grove 2005 MND; Lemon Grove DVSPE Baseline Report – Environmental Issues)

Less Than Significant with Mitigation Incorporated. Paleontological resources are the fossil remains of past life forms, which includes vertebrate, invertebrate, and plant species. The Specific Plan area is currently developed for urban uses; however, subsurface paleontological resources may be present. The majority of the Specific Plan area consists of the Linda Vista geologic formation, which has a very low potential for paleontological resources. Only a small area in the southern portion of the Specific Plan area includes the Mission Valley Formation which does have a medium to high potential for paleontological resources. Grading/excavation within the Mission Valley Formation could directly or indirectly destroy a unique paleontological resource. Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation.

Mitigation Measures

CR-3: see section 5(b)

Significance Finding

With implementation of the mitigation measure identified above, impacts related to paleontological resources would be reduced to **less than significant** levels.

d) Response (Sources: GP MEIR; Lemon Grove 2005 SP MND)

No Impact. The Specific Plan area is currently developed for urban uses and is devoid of any known human remains. Therefore, there will be no impact.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
6) Geology and Soils – Would the Project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Discussion of Impacts

a) Response

i-iii. (Sources: 2017 Lemon Grove DVSPE Baseline Report; 2005 Lemon Grove DVSP MND; Lemon Grove Municipal Code)

Less Than Significant. Like most urban areas in Southern California, Lemon Grove is subject to earthquakes. Substantial ground shaking can result in property damage, injuries, and casualties. There are no active or potentially active faults within the Specific Plan area, or within the City as a whole, and there are no special study zones designated by the State Geologist that fall under the

regulatory oversight of the Alquist-Priolo Act. The nearest known active faults are the Rose Canyon and the Coronado bank faults which are located approximately 8 and 14 miles west of the city, respectively. The nearest potentially active fault is the La Nacion Fault, located 2 miles west of the City.

Liquefaction of cohesionless soils can be caused by the strong vibratory motions that result from earthquakes. During a strong and nearby earthquake, cohesionless soils can lose strength and cause soil deformation and structural damage. Liquefaction occurs when the sediment is of fine sand or silt size, loosely consolidated, saturated and subject to vibration. There are no known areas subject to liquefaction within the City of Lemon Grove. Any construction proposed in the Specific Plan area is required to design foundation systems to meet the Lemon Grove Building Code (which adopts the California Building Code). A soils report and recommendations from an engineer must be submitted with requests for building permits. Therefore, the impact will be a **less than significant**.

iv. (Sources: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. The Specific Plan area is highly urbanized and contains a relatively flat topography. As such, the potential for landslides to occur within the Specific Plan area is minimal, and impacts will be **less than significant**.

b) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report, GP MEIR)

Less Than Significant Impact. The Specific Plan area contains four soils types: Redding-Urban land complex (RhC); Placentia sandy loam (PeC); Las Flores-Urban land complex (LfC), and Diablo-Urban land complex (DcD). The Specific Plan area is currently developed for urban uses, therefore the proposed project will not increase the sealed surface area of the site or otherwise result in substantial soil erosion or loss of topsoil. Therefore, the impact will be **less than significant**.

c) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated. The Specific Plan area contains four soils types: Redding-Urban land complex (RhC); Placentia sandy loam (PeC); Las Flores-Urban land complex (LfC), and Diablo-Urban land complex (DcD). These soils have a Medium-High or High shrink-swell potential. Therefore, the Specific Plan area may be located on a geologic unit or soil that is unstable or could become unstable.

Mitigation Measures

GEO-1: Projects undergoing ground disturbance are required to have a geotechnical soils report prepared with recommended mitigation measures by a professional engineer incorporated into the approved grading plans. This includes any redevelopment projects affected by unstable geologic units, earthquakes, soils with high shrink-swell potential and any soils within the Specific Plan area.

Significance Finding

With implementation of the mitigation measures identified above, impacts related to geologic resources would be reduced to **less than significant** levels.

d) Response (Sources: 2017 DVSPE Baseline Report; 2005 Lemon Grove DVSP MND)

Less Than Significant Impact with Mitigation Incorporated. Expansive soils are surface deposits rich in clays that expand when wet and shrink when dried. The change in volume can exert detrimental stresses on buildings and cause structural damage. Expansive soils can be widely dispersed and can be found in hillside areas as well as low-lying alluvial basins. The Specific Plan area contains four soils types: Redding-Urban land complex (RhC); Placentia sandy loam (PeC); Las Flores-Urban land complex (LfC), and Diablo-Urban land complex (DcD). All of these soils have a Medium-High or High shrink-swell potential, resulting in potentially significant impacts.

Mitigation Measures

GEO-2: see section 6(c)

Significance Finding

Implementing the above mentioned Mitigation Measures would minimize impacts related to the construction of buildings on expansive soils, reducing impacts to **less than significant** levels.

e) Response (Sources: Lemon Grove DVSPE Baseline Report; Lemon Grove Sanitary Sewer Master Plan)

No Impact. The Lemon Grove Sanitation District provides sewer service within the study area. There is existing sewer service infrastructure within the Specific Plan area, and any development projects authorized by the Specific Plan would be required to connect to the sewer network and trunk lines. Therefore there will be no need for septic tanks or alternative waste water disposal systems, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
7) Greenhouse Gas Emissions – Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion of Impacts

a – b) Response (2018 Downtown Specific Plan; April 8, 2017, City of LG City Council Memo – DVSPE; SANDAG Smart Growth Concept Map)

Less Than Significant Impact with Mitigation Incorporated.

The Specific Plan would allow for 2,647 residential units and 6,267,410 square feet of non-residential uses within the City of Lemon Grove's downtown within close proximity to its trolley station. Direct and indirect GHG emissions associated with this increased allowable density/intensity could be generated and have a significant impact on the environment. However, the Specific Plan's emphasis on increased density/intensity near the City's transit stations (e.g., the trolley station) and a multi-modal circulation network will help to support smart growth and provide an alternative to driving a vehicle.

In 2006, SANDAG accepted the first Smart Growth Concept Map (SGCM) to illustrate the location of existing, planned and potential smart growth areas in the County. SANDAG has identified the expanded area around the existing 2005 Downtown Village Specific Plan as a Smart Growth Opportunity Area (LG-2 Town Center) which includes the Specific Plan area. The City was awarded a grant from SANDAG to prepare this Specific Plan. In an effort to promote smart growth and transit oriented developments (TODs), the Specific Plan's highest intensities/densities are generally located within approximately ¼ mile from the trolley station at the intersection of Lemon Grove Avenue and Broadway. A key goal of preparing the Specific Plan is to leverage development opportunities near the City's trolley/transit stations which is consistent with SANDAG's Smart Growth Concept Map.

Mitigation Measure

GHG-1: Implementation of the pedestrian and bicycle plans in the Specific Plan as required with new development in the Specific Plan area will mitigate any GHG impacts.

Significance Finding

With implementation of the mitigation measure identified above, impacts related to Greenhouse Gas Emissions would be reduced to **less than significant** levels.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
8) Hazards & Hazardous Conditions – Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☒	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Sources: CA Fire Code, 2017 Lemon Grove DVSPE Baseline Report, GP MEIR; 2005 Lemon Grove DVSP Specific Plan MND)

Less Than Significant Impact with Mitigation Incorporated. Many types of businesses utilize, transport, or store various chemicals in their routine business operations. Such substances could range from common automobile oil and household pesticides to chlorine, dry-cleaning solutions, ammonia, or substances used in commercial and industrial operations. Therefore, the operation of specific projects within the Specific Plan area may include commercial developments that transport, store or use hazardous substances during operation. In addition, implementation of the Specific Plan will result in the development of new residential and commercial uses that will result in more household and commercial hazardous materials being used within the City, thereby creating a potentially significant hazard to the public or the environment. Therefore, implementation of the Specific Plan could result in a potentially significant impact.

Mitigation Measures

HHC-1: See Section 3 a-c (AQ-6).

HHC-2: To reduce the number of potential injuries, the City shall minimize and control the concentrations of hazardous materials in areas where people congregate, such as neighborhoods, schools and shopping areas. The Fire Marshal reviews new development, land use and event proposals for hazardous materials and requires mitigation in accordance with the CA Fire Code.

HHC-3: When issuing business licenses, the City shall ensure that the appropriate permits to handle, transport, use and dispose of hazardous materials have been obtained from the regulatory agencies as required by the Fire Marshal and enforced in the CA Fire Code.

HHC-4: In coordination with the County Hazardous Materials Management Division (HMMD) and the Lemon Grove Fire Department, the City shall establish and enforce routes for the transport of hazardous materials. The routes should avoid areas where people congregate such as neighborhoods, schools and shopping areas. Enforce through the HMMD permit process and request monitoring by the Fire Department and Sheriff's Department.

HHC-5: The City shall implement the following actions:

- When redevelopment proposals are submitted, review historic uses of the project site and assess the potential for possible hazardous materials contamination. When soil disturbance is proposed, require the developer to obtain a Phase I Environmental Assessment and a Phase II Environmental Assessment if recommended in the Phase I to determine if historic land uses could have resulted in site contamination if a hazardous waste site exists, and require clean-up prior to commencement of construction.
- Each year the County Hazardous Materials Management Division (HMMD) informs the City about known hazardous waste sites. The City shall monitor the HMMD list and help coordinate clean-up efforts between HMMD and property owners. The City will check the HMMD list when reviewing development proposals.

HHC-6: The City shall implement the County of San Diego's Hazardous Waste Management Plan locally, and participate in future updates.

Level of Significance After Mitigation

Requiring new development within the area to comply with these mitigation measures would minimize the chances of the proposed project creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, resulting in a **less than significant** impact with mitigation incorporations.

b) Response (Sources: GP MEIR; 2005 Lemon Grove DVSP Specific Plan MND)

Less Than Significant Impact with Mitigation Incorporated. Implementation of the Specific Plan would result in an increase in development of residential units, office space, and commercial/civic/institutional uses throughout the study area. This increase in development could increase the use and transport of hazardous materials within the study area associated with construction and business operations. The increased use and transport of hazardous materials within the Specific Plan area increases the potential for accidental releases of hazardous materials, which poses a threat to the health and safety of residents. The level of risk associated with hazardous materials would be evaluated on a project-by-project basis during the development process.

Mitigation Measures

HHC-7: see section 8(a)

Significance Finding

With implementation of mitigation measures **HHM-1** to **HHM-7**, any potential hazardous materials release would be identified and, if necessary, characterized and remediated to the standards set by the applicable Federal State, and local regulatory agencies. Compliance with regulations established by Federal, State and local regulatory agencies is considered adequate to offset the negative effects related to the reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the study area, reducing impacts to **less than significant** levels.

c) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated. The following schools are located within the study area:

- Lemon Grove Academy Elementary School, 7885 Golden Avenue
- Lemon Grove Academy Middle School, 7866 Lincoln Street

Since the Specific Plan does not include plans for any specific development projects, it is difficult to identify the level of risk any future development poses towards the existing schools within the project area resulting from the emission of hazardous materials or acutely hazardous materials, substances, or waste. The Specific Plan would allow for 2,647 residential units and 6,267,410 square feet of non-residential uses which could result in the increase of the use of hazardous materials

within ¼ of a mile (depending on the type and function of the land uses) of the existing schools within the study area.

Any commercial ventures would be subject to Federal and State regulations pertaining to the transport, use, and disposal of hazardous materials, as well as the applicable Mitigation Measures pertaining to hazardous materials. Applicable Federal, State, and local regulations are as follows: California Proposition 65; the Unified Hazardous Waste and Hazardous Material Management Regulatory Program; the California Accidental Release Prevention Program; the San Diego County Hazardous Materials Business Plan; and the California Code of Regulations Title 26, Toxics.

Mitigation Measures

HHC-8: see section 8(a)

Significance Finding

Requiring any new development within the Specific Plan area to comply with federal, state, and location regulations and the mitigation measures above would minimize the emission of hazardous materials or the handling of hazardous materials, substances, or waste within ¼ of a mile from the existing schools within the Specific Plan area, resulting in **less than significant** impacts with mitigation incorporated.

d) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Specific Plan area includes a mix of residential, commercial, industrial, retail, and public uses. Various commercial and industrial developments in the area transport, store, or use hazardous materials. A review of the Department of Toxic Substance Control EnviroStor Database revealed no sites within the City included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

e) Response (Sources: Montgomery Field Airport Land Use Compatibility Plan December 20, 2010)

Less Than Significant Impact with Mitigation Incorporated. The Montgomery Field Airport is located approximately 14 miles to the northwest of the Specific Plan area. In general, the northern, eastern, and southern areas and portions of the western areas of the Specific Plan are located within Montgomery Field Airport's airspace protection and overflight notification Review Area 2.

Mitigation Measures

HHC-9: The City shall coordinate with the San Diego County Airport Land Use Commission (ALUC) for projects located within Montgomery Field Airport's Review Area 2 and Part 77 Airspace Surfaces and require new development to comply with ALUC policies and procedures.

Significance Finding

Requiring any new development to comply with ALUC policies and procedures would result in **less than significant** impacts with mitigation incorporated.

f) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There are no private airstrips within the City of Lemon Grove, resulting in **no impact**.

g) Response (Sources: Lemon Grove General Plan, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Specific Plan does not propose any changes to the existing Lemon Grove Emergency Survival Program Plan. The Specific Plan will serve to provide goals and policies to guide development and keep residents of Lemon Grove as protected as possible from potential hazards. Therefore, **no impact** will occur.

h) Response (Sources: GP MEIR; 2017 Lemon Grove DVSPE Baseline Report)

No Impact. Implementation of the Specific Plan will result in new development and/or redevelopment within the urbanized area of Lemon Grove. The potential for dangerous wildland fires in Lemon Grove is very limited, due to the urbanized nature of the City. There are very few vegetative communities within the City as a whole, and the surrounding neighborhoods and areas around the Specific Plan area are essentially developed. Given this highly urbanized area and a general lack of natural vegetation, the likelihood of wildland fires within the city is very limited, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
9) Hydrology and Water Quality – Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. Future development associated with implementation of the Specific Plan may contribute to water quality degradation in and around the study area. Runoff from disturbed areas would likely contain silt and debris, resulting in a long-term increase in the sediment load of the storm drain system serving the study area. There is also the possibility for chemical releases at future construction sites. Substances such as oils, fuels, paints, and solvents may be transported to nearby drainages, watersheds, and groundwater in stormwater runoff, wash water, and dust control water. The significance of these water quality impacts would vary depending upon the level of construction activity, weather conditions, soil conditions, and increased sedimentation of drainage systems within the area.

However, new development and reconstruction projects within the study area would be required to comply with all applicable stormwater regulations as implemented by the California State Water Resources Control Board and the San Diego Regional Water Quality Control Board, which is the Regional Board that oversees the NPDES stormwater permitting procedure for the County of San Diego. The SDRWQCB's Storm Water Management Unit (Unit) implements the permitting and compliance procedures to reduce pollutants in municipal, construction, and industrial storm water runoff. The Unit regulates discharges from Phase I municipal separate storm sewer systems (MS4s) in the San Diego region under the Regional MS4 Permit. The Regional MS4 Permit covers the County of San Diego, various municipalities, and other special district entities located within the County who own and operate large MS4s which discharge stormwater and non-stormwater runoff to surface waters throughout the San Diego region.

In addition, the City requires new development to adhere to the Lemon Grove Stormwater Management and Discharge Control Ordinance (Code), which provides the regulatory language for oversight of stormwater discharges within the City. The Code allows for the establishment of stormwater runoff management programs and measures that the City will be required to implement, and prohibits the discharge of pollutants into MS4s or into stormwater drains while providing various enforcement mechanisms and penalties for illegal discharges. The City updated its stormwater runoff best management practices (BMPs) pursuant to the 2013 NPDES MS4 permit covering the San Diego region (Order No. R9-2013-0001, as amended by R9-2015-0001). The updated permit expanded on the compliance requirements for stormwater runoff associated with new development and redevelopments, and the City issued the new Design Manual to conform to the new requirements of the Regional Water Quality Control Board 2013 MS4 permit. In 2015, the City implemented the Jurisdictional Runoff Management Program (JRMP) in response to the new MS4 Permit issued by the San Diego Regional Water Quality Control Board (Order No. R9-2013-0001, as amended by R9-2015-0001). This permit required the City to prepare jurisdictional and watershed scale plans that detail how the City will comply with the MS4 requirements. The current Lemon Grove MS4 system carries all runoff from rain, over-irrigation, and other sources of water to receiving water bodies without first treating the water at a treatment plant.

As all future development within the Specific Plan area would be required to comply with regional stormwater requirements, impacts will be **less than significant**.

b) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Helix Water District obtains its water from San Diego County Water Authority SDCWA), which acts as the regional water wholesaler within the San Diego Area and purchases and imports water from various sources. The Helix Water District does not extract any groundwater for retail supply; water sources are a combination of imported and locally sourced water (imported from the SDCWA and locally sourced from Lake Cuyamaca, El Capitan Reservoir, and Lake Jennings). Since the water service provider for the Specific Plan area does not extract groundwater for retail distribution, the implementation of the Specific Plan will not substantially deplete or interfere with groundwater, resulting in **no impact**.

c) Response (Source: Specific Plan; 2017 Lemon Grove DVSPE Baseline Report; 2005 Lemon Grove DVSP MND)

Less Than Significant Impact. The Specific Plan is not proposing any site-specific development projects, nor does it propose altering any drainage patterns, streams, or rivers within the study area. The existing area is highly developed and contains large impervious surface areas. Redevelopment may alter the existing drainage patterns, but these will be required to be engineered to meet all applicable standards and regulations of the Regional MS4 stormwater permit. All applicable standards and regulations discussed in section 9(a) above would be applied to future development projects to ensure that they are not constructed in a way that would alter a stream or river, or result in substantial erosion or flooding, resulting in **less than significant** impacts.

d) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. The Specific Plan is not proposing any site-specific development projects, nor does it propose altering any drainage patterns, streams, or rivers within the study area. The existing area is highly developed and contains large impervious surface areas. Redevelopment may alter the existing drainage patterns, but these will be required to be engineered to meet all applicable standards and regulations of the Regional MS4 stormwater permit. Therefore, impacts will be **less than significant.**

e) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. According to the 1996 Master Plan of Drainage, there are currently six areas within the Specific Plan area identified as being deficient. These deficiencies affect the corrugated metal pipe (CMP) portion of the existing pipe system, and have been identified in the following Specific Plan areas:

- Lemon Grove Avenue at Broadway to Hilltop Drive: 30 inch (in) CMP at 1,190 feet (ft.)
- Lemon Grove Avenue at Massachusetts Avenue to Beryl St: 72 in RCP at 1,940 ft.
- Broadway and Massachusetts Avenue: 30 in RCP at 100 ft.
- Broadway and Massachusetts Avenue to north of Broadway at Citrus Street: 30 in CMP at 750 ft.
- North of Broadway at Citrus Street to Harris Street: 48/30 in CMP at 430 ft.
- North of Broadway at Harris Street to West Street: 48 in CMP at 300 ft.

None of these storm drains listed in 1996 plan have been addressed at this point; however they are part of a future Capital Improvement Plan project.

There are no known areas of flooding within the area, and development under the Specific Plan would not significantly remove permeable surfaces as most of the land has been previously developed. Redevelopment may alter the existing drainage patterns but will be required to be engineered to meet all applicable standards and runoff regulations. Therefore, impacts will be **less than significant**.

f) **Response** (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. In February 2016, the City adopted the Best Management Practices Design Manual, which is based on the Model BMP Design Manual issued by the California Regional Quality Water Board, San Diego Region. As part of the non-point source management program under NPDES, Best Management Practices (BMPs) are required to be implemented by all permittees to reduce pollutants in site runoff. Implementation of BMPs in future development projects will decrease water quality impacts from nonpoint source pollutants. Therefore, there will be **no impact.**

g) **Response** (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There is no flood hazard zone as mapped within a Federal Emergency Management Agency Flood Insurance Rate Map (Zone X) within the Specific Plan Area, resulting in **no impact**.

h) **Response** (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There is no flood hazard zone as mapped within a Federal Emergency Management Agency Flood Insurance Rate Map (Zone X) within the Specific Plan Area, resulting in **no impact**.

i) **Response** (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. There is no flood hazard zone as mapped within a Federal Emergency Management Agency Flood Insurance Rate Map within the Specific Plan Area, and there is no dam inundation zone mapped within the City, resulting in **no impact**.

j) **Response** (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The Specific Plan area is located inland with no substantial bodies of water nearby. Therefore, the risk of inundation by seiche, tsunami, or mudflow is considered to be low. Therefore, there will be **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
10) Land Use Planning – Would the Project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Sources: Specific Plan; General Plan)

No Impact. The Specific Plan area is adjacent to similar residential and non-residential uses that have been approved by the City of Lemon Grove. The Specific Plan includes an area that is approximately four times larger than the City's 2005 Downtown Village Specific Plan and replaces the City's 2005 Downtown Village Specific Plan. The Specific Plan policies and development and design standards are intended to enhance the existing community. Given the existing setting, the implementation of Specific Plan would not physically divide an established community, resulting in **no impact**.

b) Response (Source: Specific Plan; 2005 DVSP MND)

No Impact. The development of the Specific Plan builds upon a series of previous planning efforts. In 2005, the City adopted the 2005 DVSP (Special Treatment Area I). The 2005 DVSP was required to be prepared as part of the Community Development Element of the City's General Plan. The 2005 DVSP was designed to stimulate economic development through mixed-use and transit-oriented development opportunities downtown. In 2015, the City Council expressed interest in exploring new opportunities downtown after SANDAG identified an expanded Smart Growth Area in the City's Downtown. Subsequently, the City was awarded a grant to expand the 2005 DVSP to be consistent with the San Diego Association of Government's Smart Growth Concept Map. As such, this Specific Plan area is approximately four times larger than the 2005 DVSP. A key goal of updating the 2005 DVSP and incorporating the larger area for the Specific Plan is to leverage development opportunities near the City's transit stations and to achieve goals related to economic development, place making and mobility that improve the City's public spaces and attract land uses that are ideal for families and professionals. The Specific Plan policies and development and design standards are intended to enhance the existing community and fulfill the General Plan's vision for downtown.

Once adopted, the Specific Plan will constitute the primary zoning provisions for the Specific Plan area. The Specific Plan requirements supersede the requirements of the City of Lemon Grove's Zoning Chapter of the Municipal Code (Title 17, Zoning). If there is a conflict between the regulations provided in the City's Municipal Code and this Specific Plan, the regulations provided in the Specific Plan shall prevail. Where direction is not provided in this Specific Plan, the provisions of the City's Municipal Code shall prevail. Therefore, there will be **no impact.**

c) Response (Sources: County of San Diego South County Multiple Species Habitat Conservation Plan - South County MSCP)

No Impact. The Specific Plan area is not within any core biological resource area and/or associated habitat linkages, as identified by the South County MSCP. The entire Specific Plan area is urbanized and built out. As such, implementation of the Specific Plan does not conflict with any habitat conservation plan or natural community conservation plan resulting in **no impact.**

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
11) Mineral Resources – Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Sources: California Geologic Survey Mineral Land Classification Map, Special Report 153, Plate 26)

No Impact. The entirety of the Specific Plan area is within highly urbanized lands. According to the California Geologic Survey, the entire City of Lemon Grove is within MRZ-3 designated lands, which are areas that contain mineral deposits, the significance of which cannot be evaluated from available data. Given that the Specific Plan area is already built out, implementation of the Specific Plan will not result in the loss of availability of a known mineral resource of value, resulting in **no impact**.

b) Response (Sources: GP MEIR; Lemon Grove 2005 DVSP)

No Impact. The General Plan and the 2005 DVSP do not identify any delineation of a locally-important mineral resource recovery site within the Specific Plan area. Therefore, implementation of the Specific Plan would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
12) Noise – Would the Project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Sources: GP MEIR; 2005 Lemon Grove DVSP MND; Lemon Grove Municipal Code Noise Abatement and Control Ordinance, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated.

Operational Noise

The Specific Plan area is planned primarily for mixed-use development with some residential, commercial, and retail uses, which are likely to generate increased vehicle trips in this area, causing an incremental and proportionate contribution to noise impacts. Such development would generate additional traffic which would potentially increase ambient noise levels to existing land uses along roadways within the Specific Plan area. A project will have a significant impact to noise if it will:

- Cause residential interior noise levels to exceed 45 decibel A-weighted scale (dBA);
- Cause residential exterior noise levels to exceed 60 dB CNEL;
- Cause the ambient noise level to increase in a quiet area (<60 dB CNEL) by more than 5 dB;

- Cause the ambient noise level to increase in a moderately noisy area (60-65 dB CNEL) by 1-3 dB (when noise standards are already exceeded), or by more than 5 dB; or
- Cause the ambient noise level to increase in a noisy area (> 65 dB CNEL) by 1-3 dB (if it measurably exacerbates the problem) or by more than 5 dB.

It is possible that some land uses, specifically proposed outdoor retailers, parks, live music and events, may expose nearby uses to elevated noise levels within the Specific Plan area. Some land uses may also experience noise levels that exceed the allowable Land Use Compatibly Criteria standards due to roadway traffic. Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation.

Construction Noise

The City of Lemon Grove Municipal Code Noise Ordinance (Chapter 9.24 Noise Abatement and Control) prohibits the use of construction equipment between the hours of 7:00 PM and 7:00 AM Monday through Saturday, and prohibits the operation of construction equipment on Sundays and holidays. No construction equipment shall be operated that causes noise to occur at a level in excess of 75 dB for more than eight hours during any twenty-four hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

While the Specific Plan does not propose any site specific development, it would allow for additional future development which would generate noise during construction activities. However, all construction activity must comply with the City's Noise Ordinance, thereby ensuring noise impacts will be less than significant. Therefore, impacts related to the exposure of people to construction noise levels above the existing standards would be minimized and are expected to be less than significant.

Mitigation Measures

NOI-1: The City shall use the noise and land use compatibility standards established in the Noise Element of the General Plan to guide future development within the Specific Plan area. The City shall consider both existing and future noise levels of the project site when considering noise compatibility, using the noise contours for 1995 and 2015 in the General Plan Noise Element. The City shall require measures to attenuate noise when needed to increase the compatibility of the proposed use with the noise environment.

NOI-2: The City shall review future residential development to assure that it complies with the California Noise Insulation Standards (Title 24, part 2, California Code of Regulation), which requires that interior noise levels for both single-family and multiple-family dwelling units equal 45 decibels dB(A) or less. Furthermore, noise studies shall be required for all proposed residential sites in close proximity to automotive traffic, rail or industrial development with baseline noise levels exceeding 60 dB(A) CNEL. The City shall require individual development projects to demonstrate that the interior noise level will equal 45 dB(A) or less.

NOI-3: The City shall review proposed development projects for noise impacts to determine if the surrounding noise conditions are incompatible with the proposed use, or if the proposed use

will generate noise that impacts nearby sensitive noise receptors such as residences, schools, parks, churches and the library. A noise study shall be required with recommendations for mitigation to ensure interior noise levels are adhered to and exposure to and impacts from surrounding noise sources are minimized. For all identified impacts, the City shall require appropriate mitigation to reduce noise impacts to acceptable levels.

NOI-4: The City shall enforce Title 24 requirements in new residential development.

NOI-5: Working with the Metropolitan Transit Development Board, the City shall identify objectionable sources of trolley noise and appropriate measures to reduce noise, where feasible.

NOI-6: The City shall coordinate with the Sheriff's Department to ensure active enforcement of vehicle noise and speed laws.

NOI-7: The City shall enforce the Noise Abatement and Control Ordinance, particularly in residential neighborhoods, to maintain quiet and peaceful conditions except for permitted outdoor activities. The City shall, as necessary, revise the ordinance to address new noise concerns. The City shall educate the community about the noise ordinance to encourage both compliance and reporting of violations.

Significance Finding

All future development within the Specific Plan area would be subject to compliance with the Lemon Grove Noise Ordinance as well as Mitigation Measures NOI-1 through NOI-7, thereby reducing **noise impacts to less than significant levels.**

b) Response (Sources: GP MEIR Section; Lemon Grove 2005 DVSP MND; Lemon Grove Municipal Code Noise Abatement and Control Ordinance, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source.

The Specific Plan is not proposing any specific development or construction project. However, development and any associated construction are likely to occur as a result of implementing the Specific Plan, which in turn may create minor groundborne vibrations during the construction process. Any such vibrations would be temporary in nature and less than significant; additionally, conformance with the City's Noise Abatement and Control Ordinance (Chapter 9.24 of the Lemon Grove Municipal Code) is required for operation of any powered construction equipment at any construction site thereby reducing **noise impacts to less than significant levels.**

c) Response (Sources: GP MEIR; 2005 Lemon Grove 2005 MND; Lemon Grove Municipal Code Noise Abatement and Control Ordinance, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant with Mitigation Incorporated. As discussed in section 12(a), operational noise impacts may be potentially significant based on incremental development within the Specific Plan area. However, application of Mitigation Measures NOI-1 through NOI-7 would reduce these impacts to less than significant levels.

Mitigation Measures

NOI-8: See section 12(a)

Significance After Mitigation

With the application of Mitigation Measures NOI-1 through NOI-8, impacts associated with a permanent increase in ambient noise levels within the project area are expected to be less than significant.

d) Response (Sources: GP MEIR; Lemon Grove 2005 DVSP 2005; Lemon Grove Municipal Code Noise Abatement and Control Ordinance, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact With Mitigation Incorporated. As discussed in section 12(a), construction noise impacts are expected to be less than significant. All future construction occurring within the Specific Plan area would be required to comply with the City's Noise Abatement and Control Ordinance, thereby minimizing any temporary or periodic noise level increases in the project vicinity. However, it is possible that some land uses, specifically proposed outdoor retailers, parks, live music and events, may expose nearby uses to elevated noise levels within the Specific Plan area. Some land uses may also experience noise levels that exceed the allowable Land Use Compatibly Criteria standards due to roadway traffic. Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation.

NOI-9: See section 12(a)

Significance Finding

All future development within the Specific Plan area would be subject to compliance with the Lemon Grove Noise Ordinance as well as Mitigation Measure NOI-9, thereby reducing **noise impacts to less than significant levels.**

e) Response (Sources: City of San Diego Airport Land Use Compatibility Plans, City of Lemon Grove, Gillespie Field Airport Land Use Compatibility Plan, December 2010)

Less Than Significant Impact. The project site is not within the immediate vicinity of an airport. The Montgomery Field Airport is located approximately 14 miles to the northwest of the Specific Plan area. The Specific Plan is located within Montgomery Field's Airport Influence Area (AIA) but not within its noise contour map. The nearest airport, Gillespie Field, is about eight miles from the Specific Plan area. The Specific Plan area is not within any airport noise exposure noise contour.

Although the Specific Plan is within Montgomery Field's AIA, it is not located within any noise contour map, and is not within 2 miles of a public airport, resulting in **less than significant impact.**

f) Response (Sources: County of San Diego Existing Noise Contours – General Plan Figure N-1)

No Impact. The study area is not within the vicinity of a private airstrip resulting in **no impact.**

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
13) Population and Housing – Would the Project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Sources: Lemon Grove DVSPE Baseline Report; Specific Plan)

Less Than Significant Impact.

Based on the allowed density and intensity within the currently adopted 2005 DVSP and the expansion area studied in the 2017 DVSPE Baseline Report, existing polices and building practices allow for a maximum theoretical yield of 1,898 residential units and 8,265,938 square feet of non-residential space.

The Specific Plan allows for 2,647 residential units and 6,267,410 square feet of non-residential uses. The Specific Plan allows more residential and less non-residential than what is currently projected. However, most of the intensity/density in the Specific Plan is focused within three Zoning Districts that are in close proximity to the City's trolley station. Moreover, any impacts associated with the increase in overall dwelling units is offset by Development Impact Fees for public services (Fire, Police, Schools, Parks, Etc.) and utility systems, as well as the reduction in overall non-residential space for the Specific Plan area. In addition, the Specific Plan area is not located in an undeveloped area of the City that does not have access to existing infrastructure. Though the infrastructure within the Specific Plan area (water lines, sewer lines) may need to be upgraded to accommodate an increased population, the infrastructure is in place would not be located in or extended to areas without existing infrastructure or access to existing infrastructure. Therefore, the Specific Plan would only induce growth that is consistent with regional planning policies designed to develop intensity near transit stations consequently resulting in a **less than significant** impact.

b) Response (Sources: Specific Plan)

No Impact. The Specific Plan will encourage overall revitalization and proposes an increase in the total number of allowable dwelling units in the Plan Area resulting in increased housing stock and

options. New housing will include increased densities with improved design standards. No locations within the Specific Plan area are being proposed for a decrease in housing density. Therefore, the Specific Plan would not displace a substantial number of existing housing, resulting in **no impact**.

c) Response (Sources: Specific Plan)

No Impact. As discussed in section 13(b), implementation of the Specific Plan would not result in the displacement of existing housing. Consequently, the Specific Plan would not result in the displacement of a substantial number of people. Conversely, the Specific Plan will allow for an increase in the existing housing stock within the Specific Plan area, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
14) Public Services – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:				
a) Fire Protection?	☐	☒	☐	☐
b) Police Protection?	☐	☒	☐	☐
c) Schools?	☐	☒	☐	☐
d) Parks?	☐	☒	☐	☐
e) Other Public Facilities?	☐	☐	☒	☐

Discussion of Impacts

a) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact with Mitigation Incorporated. Fire protection services for the Specific Plan area are provided by Heartland Fire and Rescue, a Joint Powers Authority serving El Cajon, La Mesa, and Lemon Grove. Fire Station 10 is located at 7853 Central Avenue. The average response time within the City is five minutes and four seconds. Approximately 81 percent of the calls for service are for medical emergencies. Currently, there is no need for an increase in staff or equipment, as Heartland has an Insurance Service Organization (ISO) 1 classification. This is the highest rating offered by ISO and in the top 0.2% nationally, and is ranks first in the County of San Diego. However, the Specific Plan could result in an increased number of emergency calls and an increase in the needs related to facilities and equipment.

Mitigation Measures

PS-1: The City shall continue to use service standards to determine the adequacy of emergency fire protection services.

PS-2: In order to offset the costs associated with increased density and infrastructure improvements, the project applicants are required to complete a public services assessment through will serve letters on a project level and pay impact fees as appropriate.

PS-3: The City shall expand the Fire Department staff and upgrade equipment as needed to maintain the service standard and safeguard public safety. Also, the City shall upgrade equipment as needed to ensure the safety of Fire Department staff and protect the public from fire hazards.

PS-4: The City shall continue mutual aid agreements with the fire departments in the surrounding communities.

Significance Finding

With the implementation of the above mentioned policy and mitigation measures, impacts to fire protection capabilities are expected to be **less than significant**.

b) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant With Mitigation Incorporated. The City of Lemon Grove contracts with the County of San Diego Sheriff's Department for law enforcement services. The Lemon Grove Substation is located at 3240 Main Street, adjacent to Lemon Grove City Hall.

By contract, the Sheriff's Department must have at least 2 officers to be on duty at all times, and up to 5 officers to be on duty for busy periods to meet the response time standards identified in the General Plan; 5 minutes to respond to Priority 1 (life-threatening emergency) calls and 8 minutes to respond to Priority 2 (non-life threatening emergency) calls. According to the Sheriff's department, the average response time for 2016 in Lemon Grove for Priority 1 and 2 calls was 8.9 minutes. The Sheriff's station received 5,352 Priority 1 and 2 calls during 2016. Additional investigative resources can be called in to assist law enforcement staff during significant events that cannot be adequately addressed by the on-duty officers. The contract between the City and the San Diego County Sheriff's Department allows for additional discretionary staffing to be added to the Lemon Grove Substation, but requires the City to provide additional funding.

While the County Sheriff is able to meet the average response time standards, demands for law enforcement are increasing. There were 16,285 calls for service in 2015 (up from 13,600 in 2011). Responding to an increased number of calls, compounded with the relocation of the unincorporated staff to the Rancho San Diego Substation, has led to a decrease in Deputy Initiated Activities, or the ability of officers to patrol the City and respond to observable offenses as they are in progress. There were 4,084 Deputy Initiated Activities in 2015 (down from 12,349 in 2011).

In correspondence, the County Sheriff, recommended four additional deputies to augment patrols and staff special community policing-related assignments. An increase in deputy staffing would require at least one more sergeant to supervise the increase in staffing. The increase would allow for the deputies to work the areas of City Council concern (the Promenade, local parks, and the central business districts), enforce Municipal Code compliance (enforce the provisions related to litter, public nuisances, theft, drug dealing, etc.), and patrol parks, schools, and public spaces. Without this additional staff, the Sheriff's Department cannot adequately enforce the Municipal Code provisions.

The implementation of the Specific Plan will increase the overall residential and non-residential intensity in the Specific Plan area and will incrementally add to the existing demand for police protection services within the Specific Plan area.

Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation.

Mitigation Measures

PS-5: The City shall continue to use service standards to determine adequacy of emergency law enforcement service. The standard is five minutes for priority one calls and eight minutes for priority two calls.

PS-6: When the City renews the service contract with the Sheriff's Department, the City shall analyze the contracted staffing levels to reflect local service standards, demographics and crime trends.

PS-7: In order to offset the costs associated with increased density and infrastructure improvements, the project applicant is required to complete a police services assessment on a project level basis and pay impact fees as appropriate for estimated impacts on services. A study may be prepared to estimate impacts based on proposed FAR and dwelling units by number of bedrooms to develop an impact fee or other mitigation for all development in the Plan area.

PS-8: All projects are reviewed for compliance with Crime Prevention Through Environmental Design principals. Providing for more people in the downtown allows for additional eyes in public and private spaces.

Significance Finding

With the implementation of the above mentioned policy and mitigation measures, impacts to law enforcement capabilities are expected to be **less than significant**.

c) Response (Sources: GP MEIR; 2005 DVSPE MND; 2017 Lemon Grove DVSPE Baseline Report; Specific Plan)

Less Than Significant Impact With Mitigation Incorporated. The Lemon Grove School District, which operates the local elementary and middle school, and the Grossmont Union High School District, which operates the local high schools, provide facilities for the City of Lemon Grove.

There are two schools within the Specific Plan area; Lemon Grove Academy Elementary School located at 7885 Golden Avenue and Lemon Grove Academy Middle School located at 7866 Lincoln Street. Lemon Grove Academy Elementary School, which currently serves approximately 580 students, has capacity for 600 students. Lemon Grove Academy Middle School currently serves 609 students, and has capacity for approximately 650.

Based on the allowed density and intensity within the currently adopted 2005 DVSP and the expansion area studied in the 2017 DVSPE Baseline Report, existing polices and building practices allow for a maximum theoretical yield of 1,898 residential units. The Specific Plan provides an estimated/potential total buildout of 2,647 residential units.

Student Generation Factor Rates previously established in the GP can be used to estimate the number of new students each additional dwelling unit would generate. The Lemon Grove School

District utilizes a student generation rate of 0.435 elementary and middle school students generated per household. According to these rates used in the GP, buildout under the Specific Plan could result in approximately 1,151 additional students dispersed throughout all grade levels and school facilities. Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation.

Mitigation Measures

PS-9: The City shall help assess impacts to schools from new development projects and require developers to coordinate the payment of school impacts fees with the school districts.

Significance Finding

While the project could result in an increased number of students and demand on school facilities, the collection of Development Impact Fees would minimize any impacts to schools with the Specific Plan area, resulting in less than significant impacts.

d) Response (Sources: General Plan; 2005 Lemon Grove DVSP MND, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact With Mitigation Incorporated. The City of Lemon Grove provides services for parks and recreation centers and oversees approximately 20 acres of parks and recreation facilities within the City. The City has adopted a standard of 1.5 acres of parkland per 1,000 residents and although school fields and nearby regional parks expand the recreational land available to the community, a shortfall currently exists.

The Specific Plan provides an estimated/potential total buildout of 2,647 residential units, resulting in a total estimated population of 7,941 people, based on 100 percent occupancy and three people per dwelling unit (General Plan standard). The Specific Plan also includes a park overlay system and the requirement for numerous plazas and pocket parks. The total acreage of parks within the Specific Plan at buildout under the Specific Plan would need to be 11.9 acres in order to meet the citywide standard of 1.5 acres of parkland per every 1,000 residents. Based on the overlay it has been concluded that the park land goal can be achieved with buildout.

Mitigation Measures

PS-10: Developers of future projects within the Specific Plan area will be required to pay park impact fees or provide park land or facilities or a combination thereof to fund land acquisition and construction of park facilities (including land and improvements) at a rate of 1.5 acres per projected 1,000 residents (total population times acreage in in the Downtown Specific Plan Area divided by acreage in the City divided by 1,000 and times 1.5).

Significance Finding

Chapter 18.36.010 of the City Lemon Grove Municipal Code specifies that Parks and Recreation Facility dedications or fees must be paid to the City when new development occurs. Payment of the Parkland

Facilities Development Impact Fee for residential and commercial units at building permit issuance, as allowed by the Quimby Act and the Conservation and Recreation Element of the Lemon Grove General Plan, would reduce any impacts to parks to less than significant levels. With the existing and proposed park acreage within the Specific Plan area and the requirement to pay Parkland Facilities Development Impact Fees, impacts are expected to be less than significant.

e) Response (Sources: GP MEIR Sections 17, 18, 19, 20, and 22, 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact. The Specific Plan allows for 2,647 residential units and 6,267,410 square feet of non-residential uses. As such, the Specific Plan would allow for additional population growth and demand for public facilities and services, including streets, drainage facilities, and other general community services. Existing facilities are adequate to accommodate the projected service demands.

Significance Finding

Less than significant impacts are anticipated for services associated with libraries, community centers, drainage facilities, as well as a general facilities. With the payment of Development Impact Fees, impacts associated with the increased demand for other applicable public services, impacts are expected to be less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
15) Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒	☐	☐

Discussion of Impacts

a) Response (Sources: Baseline Report – Recent Projects and Planned Improvements, Specific Plan)

Less Than Significant Impact. Implementation of the Specific Plan may increase the use of existing neighborhood parks. However, developers of future projects within the Specific Plan area will be subject to the standards for open space requirements in the Specific Plan. Additionally, developers will be required to pay park impact fees or provide park facilities and land to upgrade, add to, and/or maintain existing park facilities. Therefore, any impacts will be **less than significant**.

b) Response (Source: Specific Plan)

Less Than Significant Impact with Mitigation Measures. The City of Lemon Grove provides services for parks and recreation centers and oversees approximately 20 acres of parks and recreation facilities within the City. The City has adopted a standard of 1.5 acres of parkland per 1,000 residents and although school fields and nearby regional parks expand the recreational land available to the community, a shortfall currently exists.

The Specific Plan provides an estimated/potential total buildout of 2,647 residential units, resulting in a total estimated population of 7,941 people, based on 100 percent occupancy and three people per dwelling unit (General Plan standard). The Specific Plan also includes a park overlay system and the requirement for numerous plazas and pocket parks. The total acreage of parks within the Specific Plan at buildout under the Specific Plan would need to be 11.9 acres in order to meet the citywide standard of 1.5 acres of parkland per every 1,000 residents.

Mitigation Measures

R-1: See Section 14.d.

Significance Finding

Based on the park overlays within the Specific Plan, it has been concluded that the park land goal of 11.9 acres can be achieved with buildout. Therefore, impacts are expected to be less than significant.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
16) Transportation/Traffic – Would the Project result in:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☒	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☐

The Lemon Grove Downtown Specific Plan Traffic Impact Analysis (TIA), prepared by RICK Engineering, dated February 22nd, 2018, was utilized for the following analysis. This technical study is provided as Appendix B to this document. This TIA was prepared following the guideline outlined in the SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region.

Regional Discussion

California Senate Bill 375

California State Senate Bill 375 (SB 375) became law effective January 1, 2009 as implementing legislation of Assembly Bill 32 (AB 32), which requires the state to reduce Greenhouse Gas (GHG)

emissions across all industry sectors back to 1990 levels by the year 2020. Both laws are administered and enforced through the California Air Resources Board (CARB). The law requires each of the State's 18 Metropolitan Planning Organizations (MPO) to develop a Sustainable Communities Strategy (SCS), which will include specific strategies for improving land use and transportation efficiency. Given that the transportation sector is the largest contributor to GHG pollution throughout California, SB 375 targets reduction of GHG emissions specific to cars and light trucks; the primary strategy includes the identification and development of higher density, mixed-use projects around public transportation system stations.

Transportation planning within the City of Lemon Grove is the responsibility of two agencies, including the City and the San Diego Association of Governments (SANDAG). The Metropolitan Planning Organization (MPO), SANDAG, is responsible for regional transportation planning, traffic forecasting, developing regional plans, and distributing regional transportation funds. In addition, the General Plan Circulation Element identifies policies related to transportation, and addresses various aspects of circulation, including but not limited to roadways, public transportation, trucking, and non-motorized vehicles.

San Diego Forward: The Regional Plan (SANDAG)

In October 2015, the SANDAG Board of Directors adopted San Diego Forward: The Regional Plan, which serves as the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) and guides regional transportation investments through 2050. Per SB 375 (described above), CARB set a GHG emission reduction target for the San Diego region of 7 percent by 2020 and 13 percent by 2035.

The Regional Plan exceeds these targets and projects a 15% GHG reduction by 2020 and 21% GHG reduction by 2035. The plan also identifies new transit-related services and projects within the Lemon Grove area, including:

- Planned California High-Speed Train with stops in Escondido and at the San Diego International Airport,
- Planned frequency enhancements to the Orange Line to be phased by 2035,
- Rail grade separation at Broadway/Lemon Grove Avenue to be phased by 2035, and
- Planned Bus Rapid Service (10 minute frequencies) to be phased by 2050 (Route 636 from SDSU to Spring Valley via East San Diego, Lemon Grove, and Skyline),

The plan also identifies regional bikeways that will connect Lemon Grove to neighboring jurisdictions:

- City Heights/Encanto/Lemon Grove to be phased in by 2035;
- La Mesa/Lemon Grove/El Cajon Connections to be phased in by 2035;

Generally, the RTP planned facilities include a bicycle boulevard along Lemon Grove Avenue and an enhanced Class II bike lane along portions of Broadway and Lemon Grove Avenue. The Plan has identified two roadway projects within the Lemon Grove vicinity: additional freeway connectors at the SR-94 and SR-125 interchange going from South to East and West to North at a cost of $200 million (2014 dollars). Also planned are two new managed lanes at SR-94 from I-805 to SR-125, at a cost of $369 million (2014 dollars). The Lemon Grove Realignment Project is a key project in the redevelopment of the city's downtown Village Specific Plan, this project will realign Lemon Grove Ave at SR 94 adding

traffic lanes and improving access to and from SR 94. It should be noted that funding has not been allocated for most of the San Diego Forward projects.

Smart Growth Concept Map (SANDAG)

In October 2014, SANDAG adopted a Smart Growth Concept Map. The map identifies locations next to transit that can support higher intensity uses. These locations, referred to as "Smart Growth Opportunity Areas," can be characterized at different scales based on minimum land use and transit service characteristics.

SANDAG has identified the expanded area around the existing 2005 Downtown Village Specific Plan as a Smart Growth Opportunity Area (LG-2 Town Center) which includes the Specific Plan area. The City was awarded a grant from SANDAG to prepare this Specific Plan. In an effort to promote smart growth and transit oriented developments (TODs), the Specific Plan's highest intensities/densities are generally located within approximately ¼ mile from the trolley station at the intersection of Lemon Grove Avenue and Broadway. A key goal of preparing the Specific Plan is to leverage development opportunities near the City's trolley/transit stations which is consistent with SANDAG's Smart Growth Concept Map.

Regional Transit-Oriented Development Strategy (SANDAG)

SANDAG adopted a Regional Transit-Oriented Development (TOD) Strategy in October 2015. The TOD Strategy recommends strategies and actions to assist the region in creating TOD projects and districts in association with the region's existing and planned public transit network. The overall intent of the strategy is to reduce greenhouse gas emissions; increase transit ridership, walking, and biking; and provide a greater mix of housing and employment opportunities for all residents of the region. The TOD Strategy includes specific actions for SANDAG, transit providers, and local jurisdictions. Actions identified for local jurisdictions include, but are not limited to:

- Using the Smart Growth Concept Map (further described below) as a foundation for future planning efforts that link land use and transportation and a foundation for planning transit oriented districts.
- Developing station area plans that identify a vision for future development, specify appropriate uses, set targets for minimum and maximum density and intensity and include development standards, design guidelines, and other policy tools.
- Tailoring zoning ordinances or creating new zoning districts, or specific plans/overlay zones, subdivision ordinances, development standards, and parking requirements within transit oriented districts.

The Specific Plan proposes infill development that focuses on providing uses within walking distance of the existing trolley, as well as new bike lanes and other traffic calming measures that will serve to reduce the level of GHG emissions generated from traffic within the study area. Included in those measures is a proposed road diet along Broadway between Lemon Grove Avenue and Washington Street that would significantly reduce travel speeds, number and severity of collisions, improve the pedestrian environment and walkability, and increase property values adjacent to the road diet. Similarly, it is recommended that a roundabout be placed at the intersections of Lemon Grove Way and Grove Street in order to further help mitigate traffic. As such, the Specific Plan conforms and incorporates the goals of SB 375 and the RTP/SCS.

Local Discussion

City of Lemon Grove General Plan Mobility Element (1996)

The 1996 General Plan Mobility Element identifies a circulation network and associated roadway classifications and design standards for the City. By statute, the circulation element must correlate directly with the land use element, which is within the City's Community Development Element. An update to the City's General Plan is currently underway. Currently, the Mobility Element identifies five key goals and objectives:

1. Establish a well-designed and maintained roadway system that enhances safety, ensures adequate capacity to meet future needs.
2. Increase the use of local and regional transit services by promoting land use patterns that encourage use of Trolley, bus, bicycle, and pedestrian systems.
3. Encourage the routine use of the bicycle for transportation by providing bicycle facilities that link local activity centers and the regional bikeway system.
4. Improve facilities that encourage walking as a mode of transportation.
5. Provide an adequate supply of on-and-off-street parking that does not inhibit the other transportation systems in Lemon Grove.

City of Lemon Grove Bikeway Master Plan Update (2006)

In 2006, the City adopted an update to the Bikeway Master Plan which identifies policies and programs to enhance and expand the existing bikeway network, connect gaps, address constrained areas, provide for greater local and regional connectivity, and encourage even more residents to bicycle. Projects proposed in the Bicycle Master Plan Update related to the Downtown Village include a upgrade on Broadway between Olive and Kempf to a Class II bike facility, a Main Street Bike Path along the Metropolitan Transit System (MTS) right of way that connects the southern City limit to the Downtown Village, and improvements along Massachusetts Avenue between Broadway and SR-94.

Existing Features and Traffic Operations

The Lemon Grove General Plan Mobility Element identifies a roadway network that is comprised of the 5 roadways classifications which include: Four-Lane Major Road, Class I Collector, Class II Collector, Class III Collector, and Residential/Local Collector. Additionally, a number of roadways are subject to Specific Street Plans that provide special design standards for streets with unique land use and right-of-way constraints. Listed below are the existing classifications for all of the roadways within the Specific Plan area:

Four-Lane Major

- Broadway
- Lemon Grove Avenue

Residential/Local Collector

- Main Street
- North Avenue
- School Lane
- Olive Street
- Central Avenue - East of Lemon Grove Avenue
- Buena Vista Avenue – South of San Miguel Avenue
- Vista Avenue

- Citrus Street
- Harris Street
- West Street
- Alford Street
- New Jersey Avenue

Class II Collector
- Kempf Street
- Grove Street
- Lemon Grove Way - West of Grove Street

Class III Collector
- Buena Vista Avenue – North of San Miguel Avenue
- Lemon Grove Way – East of Grove Street

Specific Street Plans
- Central Avenue – Between Main Street and Federal Boulevard; as mentioned above, the City has classified a number of roadways as Specific Street Plans. The special design standards for the aforementioned segment of Central Avenue are listed below:
    - Right-of-Way (Ft.) - 56
    - Travelway (Ft.) - 40
    - Sidewalk (Ft.) - 8

Additionally, there is an existing designated truck route that runs through the Specific Plan area located along Broadway and Lemon Grove Avenue, as well as Massachusetts Avenue north of Broadway.

The Lemon Grove Bikeway Master Plan identifies a bicycle network that is comprised of the 3 bikeway classifications which include Class I Bikeway, Class II Bikeway, and Class III Bikeway. Listed below are the existing classifications for all of the bikeways within the Specific Plan area:

Class I
- Lemon Grove Avenue – North of Broadway
- Main Street Promenade

Class II
- Broadway – Between Massachusetts Avenue and Olive Street and East of Kempf Street
- Buena Vista Avenue – North of Broadway
- Lemon Grove Avenue – South of Broadway
- Grove Street – Between Broadway and Lemon Grove Way
- Kempf Street – South of Golden Avenue
- Massachusetts Avenue – South of Pacific Avenue

Class III
- Broadway – Between Olive Street and Kempf Street
- Kempf – Between Golden Avenue and Broadway
- Main Street – South of Broadway

In general, the City of Lemon Grove roadways carry a small number of bicycle volumes, with the majority concentrated near the intersection of Broadway/Massachusetts Avenue.

Additionally, the Specific Plan area is served by the Metropolitan Transit System (MTS) for public transit. Currently, the area is served by the following facilities:

- The Lemon Grove Trolley Depot located at Broadway and Lemon Grove Avenue, which provides a stop for the Orange Line Trolley. Frequencies range from 15 to 30 minutes depending on the time of day and week. According to 2015 data, the Orange Line serves an average of 6,466 passengers per weekday.
- Two main bus routes, Route 856 (Cuyamaca to SDSU Transit Center) and Route 936 (SDSU to Spring Valley). Stops are present along Kempf Street, Broadway, and Massachusetts Avenue. Frequencies for both routes are typically 30 minutes.

The City of Lemon Grove uses the Level of Service (LOS) index to identify operational qualities of a roadway segment or intersection. Level of Service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of Service A through D is considered acceptable for peak hour intersection operations. The project area intersections were analyzed during the AM and PM peak hours.

Existing traffic operations were analyzed for twenty-two (22) intersections within the project boundary and four (4) intersections outside the project boundary. All study area intersection operate at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM Peak; LOS F, PM Peak)
- Massachusetts Avenue & Broadway (LOS E, PM Peak)
- Broadway & Olive Street (NB LOS E, PM Peak; SB LOS E, AM Peak; SB LOS F, PM Peak)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (EBL LOS E, AM Peak; EB LOS F, PM Peak)
- Kempf Street & Golden Avenue (EB LOS F, AM/PM Peaks)

Existing traffic operations were analyzed for twenty-eight (28) roadway segments within the project boundary and nine (9) roadway segments outside the project boundary. All study area roadway segments operate at *Level of Service (LOS) D or better* with the exception of Lemon Grove Avenue, between North Avenue and SR-94 Eastbound Ramps (LOS E).

Traffic operations for year 2035 without the implementation of the proposed LGDSP were analyzed for twenty-eight (28) roadway segments within the project boundary and nine (9) roadway segments outside the project boundary. All study area roadway segments operate at *Level of Service (LOS) D or better* with the exception the following segments:

- North Avenue, between Buena Vista Avenue and Olive Street (LOS F)
- Buena Vista Avenue, north of North Avenue
- Buena Vista Avenue, between Lemon Avenue and Broadway

Traffic operations for year 2035 without the implementation of the proposed LGDSP were analyzed for twenty-two (22) intersections within the project boundary and four (4) intersections outside the project boundary. All study area intersections operate at *LOS D or better* during the AM and PM peak hours with the exception of the following intersections:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM/PM Peaks)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (LOS F, AM/PM Peaks)
- Lemon Grove Avenue & North Avenue/Lemon Grove Way (LOS F, AM Peak)
- Kempf Street & Golden Avenue (EB LOS F, PM Peak)

Impact Discussion

The Specific Plan proposes a number of changes in roadway classifications; the Roadway Circulation Plan includes eight roadway classifications that are based upon function. These classifications are described below. Three of the roadway classifications, Village Promenade, East Broadway, and Mixed-Use Promenade are "Special Treatment Areas" due to their complexity and importance to downtown.
It should be noted that modifications to the cross sections and standards may be necessary if future traffic engineering studies determine specific roadway and intersection geometry need to be modified to safely accommodate intended users. Right-of-way dedication may be required of any individual development project to achieve the necessary road standards.

- *Village Promenade Special Treatment Area*: This two lane roadway (one 12' Lane each side) includes Broadway east of Lemon Grove Avenue and west of Grove Street. This roadway will function as the City's center by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

- *East Broadway Special Treatment Area*: This two lane roadway (one 12' Lane each side, alternatively, 10' lanes are permissible on both sides with additional fire protection to proposed buildings) includes Broadway east of Grove Street and west of Washington Street. This roadway will function as a continuation of the City's "main street" by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

- *Mixed-Use Promenade Special Treatment Area*: This four lane roadway (two 12' Lanes each side.) includes Broadway west of Lemon Grove Avenue and east of Olive Street. This roadway, similar to the Village Promenade Special Treatment Area, will function as a critical multimodal street segment, however with greater capacity and stronger connections to the nearby trolley station.

- Class I Collector: Designated truck route and roadway (two 12' Lanes each side) that provides a multi-modal four lane roadway with a median and left turn lanes. The primary function is to move significant volumes of people across town in a variety of travel modes. Vehicular traffic on these throughways tends to be relatively fast and continuous and transit service is often frequent. These streets should have a comfortable pedestrian realm with significant pedestrian amenities and public spaces. Access to adjacent properties is a secondary function, driveway entrance and exit points should be limited. Applies to:

- Broadway
- Lemon Grove Avenue

Both Broadway and Lemon Grove are currently classified as Class I Collectors.

- Class II Collector: Designated truck route and roadway (one lane 12' each side) that provides a two lane multi-modal roadway with a two-way center left turn lane and either parallel parking or biking facilities. Class II Collectors are designed to carry two lanes of traffic at lower volumes and slower speeds than the Class I Collectors and provide access to adjacent properties. Applies to:

  - Buena Vista Avenue (North of Broadway) *(Currently classified as a Class III Collector North of Central Avenue; as such, the Specific Plan proposes a change in classification)*
  - Grove Street (North of Broadway) *(Currently classified as a Class II Collector south of Lemon Grove Way but is a Class III Collector North of Lemon Grove way; as such, the Specific Plan proposes a change in classification)*
  - Kempf Street (North of Lincoln Street to Darryl Street, and Between Golden Avenue and Broadway)

- Class III Collector: Designated truck route and roadway (one 12' lane each side.) that provides a two lane undivided multi-modal roadway which primarily distributes traffic to and from Class I and Class II Collectors and allows access to adjacent properties. Applies to:

  - Vista Avenue (North of Broadway) *(Currently classified as a Residential/Local Collector North of Broadway; as such, the Specific Plan proposes a change in classification)*
  - Citrus Avenue (North of Broadway) *(Currently classified as a Residential/Local Collector North of Broadway; as such, the Specific Plan proposes a change in classification)*
  - Harris Street (North of Broadway) *(Currently classified as a Residential/Local Collector North of Broadway; as such, the Specific Plan proposes a change in classification)*
  - Buena Vista Avenue (South of Broadway)
  - Lincoln Street (Between Lemon Grove Avenue and Kempf Street)
  - Central Avenue (Between Olive Street and School Lane)
  - Golden Avenue (Between Lemon Grove Avenue and Kempf Street) *(Currently classified as a Class I Collector; as such, the Specific Plan proposes a change in classification)*
  - Lester Avenue (Between Broadway and Grove Street) *(Currently classified as a Residential/Local Collector North of Broadway; as such, the Specific Plan proposes a change in classification)*
  - Lemon Grove Way (West of Grove Street)

- Neighborhood Streets: Designated roadways (one 10' lane each side) that provide two lane undivided multi-modal roadway which primarily distributes traffic to and from Class III Collectors and allows access to adjacent properties. Applies to:

    - Lemon Grove Way (East of Grove Street)
    - North Avenue (Between West Street and Buena Vista Avenue)
    - Lemon Avenue (Between Buena Vista Avenue and Olive Street)
    - Pacific Avenue (Between Vista Avenue and Main Street)
    - Vista Avenue (South of Broadway)
    - Citrus Street (South of Broadway)
    - Alford Street (South of Broadway)
    - Harris Street (South of Broadway)
    - West Street (North of Pacific Avenue)
    - New Jersey Avenue (South of Broadway)
    - Olive Street (South of Broadway)
    - School Lane (Between Lincoln Street and Golden Avenue)

- Lemon Grove Ave Realignment Olive Street: A unique roadway classification resulting from the special design considerations of the Lemon Grove Avenue Realignment. Designated truck route providing a two lane multi-modal roadway with a two-way center left turn lane. The Lemon Grove Ave Realignment Olive Street cross section consists of: 5' sidewalk, 5' flex zone, 8' parking zone, 12' vehicle lane, 12' two-way left turn lane, 12' vehicle lane, 5' flex zone, and 5' feet sidewalk.

For intersections and roadway segments affected by a project, level of service (LOS) D or better is considered acceptable. If a proposed project's traffic causes the level of service to deteriorate from LOS D or better to LOS E or worse, the impacts are determined to be significant if the following values are exceeded:

- For intersections, the impacts are determined to be significant if project traffic causes an incremental delay of greater than or equal to 2.0 seconds between the no build and build scenarios.

- For roadways, the impacts are determined to be significant if the project traffic causes an increase in the Volume to Capacity ratio (V/C) of more than 0.02 between the no build and build scenarios.

Traffic operations for year 2035 with the implementation of the proposed LGDSP were analyzed for twenty-five (25) intersections within the project boundary and two (2) intersections outside the project boundary. All study area intersections operate at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM Peak; LOS F, PM Peak) *

- Lemon Grove Avenue & SR-94 Eastbound Ramps (LOS F, AM/PM Peaks)*
- Kempf Street & Golden Avenue (EB LOS F, AM/PM Peak; WB LOS F, AM Peak)*
- Grove Street & Lemon Grove Way (LOS E, AM Peak)
- Lemon Grove Avenue & North Avenue/Lemon Grove Way (LOS F, AM Peak; LOS E, PM Peak)
- Lemon Grove Avenue & Golden Avenue (LOS E, AM Peak)
- Lemon Grove Avenue & Lincoln Street (LOS F, AM Peak; LOS E, PM Peak)
- Skyline Drive/Kempf Street & Lincoln Street (LOS F, AM/PM Peaks)
- Buena Vista Avenue/Central Avenue (LOS F, AM Peak)

** Currently operate below LOS D*

Traffic operations for year 2035 with the implementation of the proposed LGDSP were analyzed for thirty (30) roadway segments within the project boundary and seven (7) roadway segments outside the project boundary. All study area roadway segments operate at Level of Service (LOS) D or better with the exception the following segments:

- North Avenue, between Buena Vista Avenue & Olive Street (LOS F)
- Buena Vista Avenue, north of North Avenue (LOS F)
- Buena Vista Avenue, between Lemon Avenue & Broadway (LOS F)
- Central Avenue, between Cypress Avenue & Olive Street (LOS F)

Additionally, the Specific Plan includes an update to the existing truck routes. The plan proposes to expand the truck route in order to help divert some of the truck traffic away from the Village Promenade/Special Treatment Area. The following roadways are designated as part of the truck route:

- Broadway – East of Massachusetts Avenue
- Massachusetts Avenue
- Buena Vista Avenue – North of Pacific Avenue
- Olive Street – North of Broadway
- Lemon Grove Avenue

The proposed roadway circulation plan also incorporates a bike lane network that would improve the overall safety and accessibility of the study area for cyclists. An additional 4 Class II and 18 Class III bike lanes are proposed to encompass the Specific Plan area along the following roads:

Class II

- Broadway – Between Massachusetts and Washington Street *(Currently classified as Class III between Olive Street and Kempf Street; as such, the Specific Plan proposes a change in classification)*
- Lemon Grove Avenue – North of Lincoln Street
- Grove Street – North of Broadway
- Kempf Street – North of Lincoln Street to Darryl Street, and Between Golden Avenue and Broadway (*Currently North of Golden Avenue is classified as Class III; as such, the Specific Plan proposed a change in classification)*

Class III

- Vista Avenue – Between Pacific Avenue and North Avenue
- Citrus Street – Between Pacific Avenue and North Avenue
- Alford Street – South of Broadway
- Harris Street – Between Pacific Avenue and North Avenue
- West Street – Between Pacific Avenue and North Avenue
- New Jersey Avenue – South of Broadway
- Buena Vista Avenue – North of Pacific Avenue *(Currently North of Broadway is classified as Class II; as such, the Specific Plan proposes a change in classification)*
- Olive Street – Between Central Avenue and North Avenue
- Main Street – Between Central Avenue and Broadway
- School Lane – Between Lincoln Street and Golden Avenue
- Lemon Grove Way
- North Avenue – West of Lemon Grove Avenue
- Lemon Avenue – Between Buena Vista and Olive Street
- Lester Avenue – Between Lemon Grove Avenue and Grove Street
- Pacific Avenue – Between Vista Avenue and Main Street
- Golden Avenue – Between Lemon Grove Avenue and Kempf Street
- Central Avenue – Between Olive Street and School Lane
- Lincoln Street – Between Lemon Grove Avenue and Kempf Street

Mitigation Measures:

Listed below are a total of 15 Mitigation Measures that are recommended in order to strategically address the impacts associated with the adoption and full build out of the Specific Plan, as well as some of the existing traffic operations that currently underserve the City. It should be noted that Mitigation Measures 4 through 15, which pertain to specific road improvements that can be made to reduce traffic delays to LOS D or better, should be done so through a series of phases. Said process will be led by the development of each of the districts laid out in the Specific Plan. As development occurs, the City will prioritize the aforementioned Mitigation Measures to be implemented on a district by district basis that will optimize future development in the Specific Plan area.

TR-1: No development will be allowed above and beyond the intensity/density thresholds in Appendix E of the Specific Plan without additional traffic analysis and City review.

TR-2: The City shall require additional traffic analysis for each Zoning District that achieves a build-out of 75 percent of the land use area intensity/density thresholds for that District in Appendix E of the Specific Plan.

TR-3 City staff should obtain estimates for level of services as available by SANDAG and comprehensively review the Specific Plan circulation network every five years to analyze estimated LOS and projected LOS to see if there are discrepancies. If LOS is lower than anticipated, traffic analysis shall be a part of all new development projects where increased FAR or dwelling units are a part with appropriate mitigation included.

TR-4: *Massachusetts Avenue & Lemon Grove Plaza Shopping Center/Sr-94 Eastbound Ramps -*

- Restripe the northbound approach to a left turn lane, through lane, and trap right turn lane
- Restripe the westbound approach to a left turn lane, through lane, and a right turn lane with a Right-turn-overlap phase

TR-5: *Grove Street & Lemon Grove Way -*

- Signalization of the intersection

It should be noted that this impact could also be mitigated with the implementation of a single-lane roundabout. It is anticipated that this location could be an ideal fit based on the right-of-way boundaries.

TR-6: *Lemon Grove Avenue & Sr-94 Eastbound Ramps -*

- Signalization of the intersection

This signal should be coordinated with the signalized intersection to the south (Lemon Grove Avenue/North Avenue/Lemon Grove Way).

TR-7: *Lemon Grove Avenue & North Avenue/Lemon Grove Way -*

- Right-turn overlap for the southbound right turn movement

TR-8: *Lemon Grove Avenue & Golden Avenue -*

- Restrict westbound left turn movements during the AM and PM peak hours

This can be achieved via physical barriers (raised medians/pork-chop islands) and/or signage.

TR-9: *Lemon Grove Avenue & Lincoln Street -*

- Construct a raised median to restrict westbound left turn movements.

It should be noted a left turn can be made onto Lemon Grove Avenue by driving up School Lane and taking a left at Central Avenue. U-turns can also be made at the intersection of Lemon Grove Avenue/Central Avenue.

TR-10: *Kempf Street & Golden Avenue -*

- Signalization of the intersection

It should be noted this signal would require coordination with the traffic signal at the intersection of Broadway/Kempf Street.

TR-11: *Skyline Drive/Kempf Street & Lincoln Street -*

- Signalization of the intersection

TR-12: *Buena Vista Avenue & Central Avenue -*

- Signalization of the intersection

The segment of Central Avenue from Cypress Street to Olive Street is also anticipated to operate acceptably during the AM/PM peak periods with the proposed signalization of Buena Vista Avenue and Central Avenue. Widening this segment of Central Avenue to a Class II collector roadway is not feasible due to the existing properties fronting the segment.

TR-13: *North Avenue, B/W Buena Vista Avenue & Olive Street –*
- Widen roadway as necessary to provide a Class II Collector roadway.

TR-14: *Buena Vista Avenue, North of North Avenue –*
- Widen roadway as necessary to provide a Class II Collector roadway.

TR-15: *Buena Vista Avenue, B/W North Avenue & Broadway –*
- Widen roadway as necessary to provide a Class II Collector roadway.

Level of Significance After Mitigation

a –f) Response (Source: LGDSP Traffic Impact Study, Specific Plan, Baseline Report)

In total, there are ten (10) TAZ zones with proposed changes to the land uses in the Specific Plan. After a review of the trips generated along the Zone Connectors for both build and no build models, it is determined that the Downtown Specific Plan will add an additional *83,500* daily vehicle trips to the roadway network. However, this conclusion does not factor in the numerous policies and goals that are incorporated into the Specific Plan which will have a positive impact on the circulation system within the Downtown area and ultimately increase transit ridership as well provide more mobility options thus reducing vehicle trips.

The Specific Plan has been designed to conform and incorporate the goals and strategies of the RTP/SCS. The Specific Plan is proposing to increase overall density within the Downtown area of Lemon Grove, where existing development and infrastructure is present. The Specific Plan includes policies that aim to achieve a more effective and safe community atmosphere by encouraging pedestrian-friendly and transit-oriented development. Additionally, as discussed in the existing policies discussion, the Specific Plan's highest intensities/densities are generally located within approximately ¼ mile from the trolley station at the intersection of Lemon Grove Avenue and Broadway which is consistent with SANDAG's Smart Growth Concept Map.

Moreover, all development authorized by the Specific Plan would be required to comply with applicable General Plan Policies, further reducing impacts. As such, conflicts with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit will be **less than significant after mitigation**.

Similarly, the Specific Plan does not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. As stated earlier, one of the main goals of the Specific Plan is to encourage the use of alternative modes of

transportation. While changes in road classifications dictated by the Specific Plan will result in roadway segments and intersections that will operate at LOS E or worse, implementation of the proposed mitigation measures will decrease the average delay within the Downtown Specific Plan area for all analyzed segments and intersections to LOS D or better, with the exception of the Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps. It should be reiterated however, that this intersection currently operates at a LOS E and F during AM and PM peaks.

A summary table of the impacts at the intersections and roadways due to the proposed Lemon Grove Downtown Specific Plan and the proposed mitigation measures can be found on **Figure 6**.

On that same note, after mitigation, the Specific Plan will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The Specific Plan proposes infill development that focuses on providing uses within walking distance of the existing trolley, as well as new bike lanes and other traffic calming measures that will serve to not only reduce the level of GHG emissions generated from traffic, but will support the City's and Region's goal of providing an increase in facilities and available options.

The Specific Plan will improve pedestrian walkability and safety within the Downtown area through the inclusion of convenient pedestrian crossing options complete with enhanced landscaping, lighting, public art, and street amenities and furniture that will enhance existing walkability and pedestrian connections. Also, a bike lane network has been incorporated in the circulation plan that would improve the overall safety and accessibility of the study area for cyclists. An additional 4 Class II and 18 Class III bike lanes are proposed within the Downtown area. As such, no significant adverse impacts to these alternative modes of transportation will occur, and overall bus, bicycle, and walkability access should be enhanced by these proposed bike lanes and walkability features, resulting in **less than significant impacts after mitigation**.

Policies and goals that are incorporated into the Specific Plan would also ensure that the street system is designed efficiently to reduce potential impacts to residential neighborhoods and that potential impacts associated with various transportation modes utilizing the same roadway system would be reduced to less than significant levels.

In regards to air traffic patterns, the nearest airport, Gillespie Field, is about eight miles from the Specific Plan area to the northeast but does not encompass the Specific Plan area. The Montgomery Field Airport is located approximately 14 miles to the northwest of the Specific Plan area. In general, the northern, eastern, and southern areas and portions of the western areas of the Specific Plan are located within Montgomery Field Airport's airspace protection and overflight notification Review Area 2. The City shall coordinate with the San Diego County Airport Land Use Commission (ALUC) for projects located within Montgomery Field Airport's Review Area 2 and Part 77 Airspace Surfaces (see Section 8.e – Mitigation Measure HHC-9). With mitigation measure HHC-9 (Section 8.e), the Specific Plan will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks resulting in **less than significant impacts after mitigation**.

Implementation of the Specific Plan would result in the development of new residential and non-residential land uses. However, it is not anticipated that development of new uses would result in inadequate design features or incompatible uses that would increase hazards due to a design feature

(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Through the City's development review process, future developments would be evaluated to determine the appropriate land use permit for authorizing their use and the conditions for their establishment and operation. Additionally, future development projects would be evaluated on a case-by-case basis to ensure that adequate access and circulation to and within the development would be provided. Access to development sites would be required to comply with all Specific Plan design standards and would be reviewed by the City of Lemon Grove and Heartland Fire and Rescue to ensure that inadequate design features or incompatible uses do not occur; this would ensure that they are designed to meet adopted standards and provide adequate emergency access. At a minimum, compliance with relevant Code standards would be required.

In regards to emergency access, future projects associated with the implementation of the Specific Plan would be required to comply with the City's development review process including review for compliance with the City's Development Code. New developments would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site, as well as applicable General Plan Policies. Individual projects would be reviewed by the City of Lemon Grove to determine the specific fire requirements applicable to the specific development and to ensure compliance with these requirements. This would ensure that new developments would provide adequate emergency access to and from the site. Further, the City and Heartland Fire and Rescue would review any modifications to existing roadways to ensure that adequate emergency access or emergency response would be maintained. Additionally, emergency response and evacuation procedures would be coordinated through the City with the police and fire departments, resulting in **less than significant impacts**.

FIGURE 6

Impacts and Mitigation Measures Summary
Lemon Grove Downtown Specific Plan

No.	Impacted Intersection	Proposed Mitigation	Mitigation LOS	
			AM	PM
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	Restripe the northbound approach to a left turn lane, through lane, and trap right turn lane and the westbound approach to a left turn lane, through lane, and a right turn lane with a right-turn-overlap phase. These improvements would decrease the average delay but the intersection is still anticipated to operate at LOS E during the AM/PM peaks.	E (61.8)	E (68.7)
15	Grove Street & Lemon Grove Way (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer. Impact can also be mitigated with the implementation of a single-lane roundabout.	A (9.3)	A (7.0)
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer. Signal should be coordinated with the intersection to the south (Lemon Grove Avenue/North Avenue/Lemon Grove Way).	C (20.3)	D (53.9)
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	Provide right-turn overlap signal phasing for southbound right turn movement.	C (32.3)	C (28.4)
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)	Restrict the westbound left turn movements during the AM/PM peak hours.	C (20.9)	B (14.2)
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)	Construct a raised median to restrict westbound left turn movements.	D (27.0)	B (13.0)
21	Kempf Street & Golden Avenue (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	B (17.0)	B (13.6)
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	A (7.9)	A (9.4)
27	Buena Vista Avenue & Central Avenue (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	A (9.6)	A (7.5)
No.	**Impacted Roadway Segment**	**Proposed Mitigation**	**Mitigation LOS**	
16	North Avenue, b/w Buena Vista Avenue & Olive Street	Widen roadway as necessary to provide a Class II Collector roadway.	C	
18	Buena Vista Avenue, north of North Avenue	Widen roadway as necessary to provide a Class II Collector roadway.	C	
19	Buena Vista Avenue, b/w North Avenue & Broadway	Widen roadway as necessary to provide a Class II Collector roadway.	C	
37	Central Avenue, bw Cypress Street & Olive Street	Widening roadway to a Class II Collector roadway is not feasible due to the existing properties fronting the segment. However, this roadway segment is anticipated to operate acceptably during the AM/PM peak periods with the proposed signalization of Buena Vista Avenue & Central Avenue.	D	

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
17) Tribal Cultural Resources – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

Discussion of Impacts

a) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report; GP MEIR)

Less Than Significant Impact with Mitigation Incorporated. The Cultural Resources Report (1995) used in the 1996 MEIR identified four (4) properties located within the Specific Plan area that are listed in the Historic Properties Data File for San Diego County. These four locations are located at: 3185 Olive Street (Atherton Chapel); 3308 Main Street (the Sonka Store); 3205 Olive Street (H. Lee House); and 3262 Main Street (Ebon McGregor House). Of these four properties, only the H. Lee House at 3205 Olive Street is eligible for National Register Status and is a State registered landmark.

An updated list of historical sites within the City of Lemon Grove has been provided by the Lemon Grove Historical Society, of which an additional three (3) historical sites were identified within the Specific Plan area. These sites are located at: 3100/3185 Main Street (First Congregational Church of Lemon Grove); 7387 Broadway (Conrad Mortuary); and 3232/3240 Main Street (Lemon Grove City Hall).

There are four (4) identified historic cultural resource locations within the Specific Plan area. These four locations are: the Big Lemon, at the southeast corner of Broadway and Main Street; the trolley station, at the Lemon Grove Trolley Depot; the Lemon Grove Library, located at 3001 School Lane; and the History Mural, located at 3308 Main Street.

Future infill development could indirectly cause a substantial adverse change in the significance of these historic resources through adjacent site demolition, modification, or alteration.

Mitigation Measure

TCR-1: see section 5(a)

Significance Finding

The Specific Plan proposes a Historic Overlay Zone and regulations for the preservation of historic properties which will serve to preserve, restore, and maintain historic elements of Lemon Grove. With the implementation of the above identified mitigation measure, impacts would be reduced to **less than significant levels**.

b) Response (Sources: Specific Plan; Tribal Consultation pursuant to SB18 and AB52)

Less Than Significant with Mitigation Incorporated. The land use policies of the Specific Plan seek to enhance the existing community by allowing for higher density development and providing for improved circulation systems and aesthetic improvements. The project does not propose any new development; therefore, there will not be any impacts to any landscape, sacred place or object with cultural value to a California Native American Tribe.

In addition, per SB 18 and AB 52 requirements, City staff provided Native American Heritage Commission notification and as a result met with representatives of the Jamul Indian Village (JIV) on August 14, 2017. JIV representatives requested that monitors be present for any ground disturbing activities resulting from projects in the Specific Plan area. Subsequently, on March 6th, 2018 a letter serving as a notice was sent to JIV from the City indicating that the consultations required for compliance with CEQA were formally closed on the basis that the aforementioned mitigation measures be incorporated into the DVSPE.

City staff also received a comment letter from the Viejas Tribal Government on May 15, 2017 requesting cultural monitors on site for any ground disturbing activities in response to the City's AB52/SB16 notice.

Mitigation Measure

TCR-2: see section 5(a)

Significance Finding

The Specific Plan does not propose any new development and with the implementation of the above identified mitigation measures, impacts would be reduced to **less than significant levels**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
18) Utilities and Service Systems – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion of Impacts

a) Response (Source: 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The City of Lemon Grove is within the jurisdictional boundaries of the San Diego Regional Water Quality Control Board. Wastewater treatment for the Specific Plan area will be provided by the Lemon Grove Sanitation District (District). The District is a member agency of the Metro Wastewater Joint Powers Authority (JPA), a group of municipalities and special districts that share in the use of the City of San Diego's regional wastewater facilities. All sewage from the City of Lemon Grove is directed to the Point Loma Wastewater Treatment Plant (PLWTP), which is operated and maintained by the JPA. The District, and its facilities serving the Specific Plan area, meet the treatment requirements of the San Diego Regional Water Quality Control Board; therefore, the

implementation of the Specific Plan would not result in an exceedance of the wastewater treatment requirements of the applicable Regional Water Quality Control Board, resulting in **no impact**.

b) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report; Specific Plan)

Less Than Significant Impact With Mitigation Incorporated. The local water distribution system, provided by Helix Water District, is a well-gridded system that is in good condition and can meet future needs. The last segments of cast-iron pipelines in the City are scheduled for replacement in 2016 and a valve replacement program is currently in place.

The Lemon Grove Sanitation District (District) is an independent entity that provides management, maintenance, and repair services for the wastewater system in the City of Lemon Grove. The Sanitary Sewer Master Plan completed in August 2017, by Dexter Wilson Engineering, indicates that the Lemon Grove Sanitation District has approximately 5,000 EDUs of capacity remaining in the existing system. Over time, as the District improves it's "Condition-Based Assessment" and implements "Capacity-Based Improvements," additional capacity may be created. There are two sewer meter basins (LG1 and LG2) that have been identified with capacity issues: Broadway (CIP18), Broadway South (CIP8), and Downtown Village Specific Plan (CIP21). Without CIP pipeline replacements or repairs, these areas will be restricted in capacity; the Sewer Master Plan includes recommendations on prioritization for such in system improvements.

Therefore, implementation of the Specific Plan may require the construction of new and/or expansion of the existing water and wastewater facilities.

Mitigation Measures

USS-1: Individual projects in the Specific Plan area are to complete a utilities and service systems analysis on a project level as required by the Lemon Grove Sanitation District, SDG&E, Helix Water District initiated by will-serve letters. Individual projects are to coordinate with Helix Water District, Lemon Grove Sanitation District, and the City to: 1) determine the increase in water/wastewater demand, and 2) identify the necessary infrastructure improvements and/or new facilities required for the specific project.

Significance Finding

Since development allowed by the Specific Plan would need to identify/fund the necessary infrastructure improvements/facilities required for the future projects and comply with the applicable General Plan Policies, impacts associated with the need for new water/wastewater facilities would be sufficiently minimized, resulting in a **less than significant** impact.

c) Response (Source: 2017 Lemon Grove DVSPE Baseline Report; Specific Plan)

Less Than Significant Impact With Mitigation Incorporated. There are no constraints to development due to existing conditions within the downtown stormwater systems, as revitalization or reuse would occur over land that has been previously developed or disturbed. However, six locations within the Specific Plan area are experiencing drainage deficiencies and should be

monitored and/or improved if these deficiencies continue or are exacerbated. The six locations include:

- Lemon Grove Avenue at Broadway to Hilltop Drive: 30 inch (in) CMP at 1,190 feet (ft.)
- Lemon Grove Avenue at Massachusetts Avenue to Beryl St: 72 in RCP at 1,940 ft.
- Broadway and Massachusetts Avenue: 30 in RCP at 100 ft.
- Broadway and Massachusetts Avenue to north of Broadway at Citrus Street: 30 in CMP at 750 ft.
- North of Broadway at Citrus Street to Harris Street: 48/30 in CMP at 430 ft.
- North of Broadway at Harris Street to West Street: 48 in CMP at 300 ft.

The Specific Plan will utilize existing storm water drainage facilities; however, implementation of the Specific Plan is anticipated to exceed current capacity.

Mitigation Measure

USS-2: Individual projects in the Specific Plan area are to complete drainage facilities assessments on a project level. Individual projects are to determine the increase in demand for drainage facilities as required by the City Engineer and 2) if applicable, identify the necessary infrastructure improvements and/or new facilities required for the specific project.

Significance Finding

Since development allowed by the Specific Plan would need to identify/fund the necessary infrastructure improvements/facilities required for future projects, impacts associated with the need for new stormwater facilities would be sufficiently minimized, resulting in a **less than significant impact with mitigation incorporated**.

d) Response (Sources: Baseline Report)

No Impact. The Helix Water District (HWD) provides water services for the City of Lemon Grove. HWD boundaries encompass a highly urbanized service area with approximately 270,000 residents and 55,600 water service connections. The HWD water sources are a combination of imported and locally sourced water. Imported water is provided by the San Diego County Water Authority via the HWD's raw water transmission system. The imported water is a blend of Colorado River and Northern California water which, on average, is 83 percent of the HWD's normal supply. Local water sources are obtained from runoff impounded behind Lake Cuyamaca, which has a storage capacity of 11,756 acre-feet, and El Capitan Reservoir, a City of San Diego reservoir for which HWD has storage rights to 10,000 acre-feet. The HWD also owns Lake Jennings, an imported water impoundment behind Chet Harrit Dam, with a storage capacity of 9,790 acre-feet. The overall proportion of imported water is expected to increase gradually through the year 2035. There are no existing infrastructure constraints regarding the ability to handle extra capacity within the Specific Plan area, resulting in no impact.

e) Response (Sources: 2017 Lemon Grove DVSPE Baseline Report)

Less Than Significant Impact With Mitigation Incorporated. As discussed in section 18(a), wastewater treatment for the Specific Plan area will be provided by the Lemon Grove Sanitation District which is a member of the Metro Wastewater Joint Powers Authority. All sewage from the City of Lemon Grove is directed to the Point Loma Wastewater Treatment Plant (PLWTP), which is operated and maintained by the Metro Wastewater Joint Powers Authority. The PLWTP has the treatment capacity of 240 million gallons per day.

The Sanitary Sewer Master Plan completed in August 2017, by Dexter Wilson Engineering, indicates that the Lemon Grove Sanitation District has approximately 5,000 EDUs of remaining capacity in the existing system. Over time, as the District improves it's "Condition-Based Assessment" and implements "Capacity-Based Improvements," additional capacity may be created. There are two sewer meter basins (LG1 and LG2) that have been identified with capacity issues: Broadway (CIP18), Broadway South (CIP8), and Downtown Village Specific Plan (CIP21). Without CIP pipeline replacements or repairs, these areas will be restricted in capacity. The Sewer Master Plan includes recommendations on prioritization for such in system improvements.

The capacity of localized portions of the Specific Plan area system may require enlargement or replacement to accommodate new development or redevelopment the resultant increased demand. Therefore, implementation of the Specific Plan could result in a potentially significant impact prior to mitigation. For new development and redevelopment projects, the Lemon Grove Sanitation District, with assistance from the City Department of Public Works, will identify localized infrastructure improvements needed to accommodate any increase in service demand.

Mitigation Measure

USS-3:
Individual projects in the Specific Plan area are to complete a sanitary sewer and water service systems analysis on a project level if required by the Lemon Grove Sanitation District and Helix Water District respectively. 1) If applicable, Individual projects are to determine the increase in demand for wastewater facilities and 2) If applicable, identify the necessary infrastructure improvements and/or new facilities required for the specific project.

Significance Finding

With the implementation of the above identified mitigation measure, impacts to associated wastewater capacity would be reduced to **less than significant** levels.

f) Response (Source: General Plan – Public Facilities)

No Impact. Implementation of the proposed project will incrementally add to the solid waste stream, thereby further decreasing the capacity of solid waste providers in the County. Waste will be generated from both construction and operational activities of new development.

The City's solid waste is sent to EDCO Station & EDCO Recovery & Transfer, which can then transfer to any number of final disposal sites for Municipal Solid Waste, including: the Otay Landfill, the

Sycamore Landfill and even others out of state. EDCO diverts construction and demolition debris to its Material Recovery facility in Lemon Grove where it recycles 70% of the incoming tonnage. These EDCO facilities have the capacity to accept waste indefinitely into the future, subject to permit renewals. (pers. comm., Carl Scherbaum, EDCO Division Manager, 9/7/17). Therefore, solid waste from the Specific Plan area will be transported facilities that have sufficient permitted capacity, resulting in **no impact**.

g) Response (Source: GP MEIR, 2017 Lemon Grove DVSPE Baseline Report)

No Impact. The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction will meet the mandatory state waste diversion goal of 50 percent by and after the year 2000. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." Local governments have an ongoing obligation to meet a 50 percent diversion goal, as mandated by AB 939.

Within the City of Lemon Grove, all solid waste disposals are subject to the requirements set forth in Title 13, Public Service, Chapter 13.24 Solid Waste, Recycling, and Green Waste Collection, as provided in the Lemon Grove Municipal Code. Chapter 13.24 provides integrated waste management guidelines for service, prohibitions, and provisions of service. While Lemon Grove's recycling program is voluntary, residents and businesses are strongly encouraged to make full use of these services. Compliance with City and County waste reduction programs and policies would reduce the volume of solid waste entering landfills. Individual development projects within the City would be required to comply with applicable State and local regulations, thus reducing the amount of landfill waste by at least 50 percent. Therefore, the proposed project would comply with federal, state and local statutes and regulations related to solid waste, resulting in **no impact**.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
19) Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion of Impacts

a) Response (Sources: Initial Study Checklist)

Less Than Significant Impact. The proposed project is located in an area that is already developed with urban uses. Implementation of the Specific Plan would not significantly degrade the quality of the environment, nor would the proposed project substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. With implementation measures presented in this initial study, the impacts shall be reduced to below a level of significance.

b) Response (Sources: Initial Study Checklist)

Less Than Significant Impact with Mitigation Incorporated.

While the overall anticipated dwelling units in the Specific Plan could exceed that anticipated by existing policies, it is possible that the build-out of the intensity/density of the Specific Plan could be

less than what is currently anticipated by existing policies and building practices. Most of the intensity/density in the Specific Plan is focused within three Zoning Districts that are in close proximity to the City's trolley station. Moreover, any impacts associated with an increase in overall dwelling units is offset by Development Impact Fees for Public Services (Fire, Police, Schools, Parks, Etc.) and Utility Systems, as well as the reduction in the allowable non-residential space for the Specific Plan area. Because implementation of the Specific Plan would not result in individually unavoidable significant adverse impacts, and because the Project is consistent with the General Plan Goals and Policies and its associated MEIR, the impacts of the Project are not considered to be cumulatively considerable.

c) Response (Sources: Initial Study Checklist)

Less Than Significant Impact with Mitigation Incorporated. As supported by the preceding environmental evaluation, implementation of the Specific Plan will not cause substantial adverse effects on human beings. Mitigation measures have been identified to reduce impacts to air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, public services, transportation and traffic, Tribal Cultural resources, and utilities and service systems, thus reducing impacts to a less than significant level with mitigation measures.

IV. Determination

DETERMINATION:

On the basis of this initial evaluation, this revised Mitigated Negative Declaration reflects the independent judgment of City of Lemon Grove Development Services Department, the:

☐ City of Lemon Grove Development Services Department finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ City of Lemon Grove Development Services Department finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ City of Lemon Grove Development Services Department finds that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ City of Lemon Grove Development Services Department finds that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ City of Lemon Grove Development Services Department finds that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

MICHAEL VIGLIONE — Name

3/15/18 — Date

Signature

3/15/18 — Date

V. Mitigation Measures

As the Lead Agency, the City of Lemon Grove is responsible for ensuring full compliance with the mitigation measures adopted for the Specific Plan. The City will monitor and report on all mitigation and construction activities, and will require its contractors to implement these mitigation measures when required. The following list includes the Mitigation Measures identified in this MND:

Air Quality

AQ-1: The City shall implement the Conservation and Recreation Element policies (8.1 – 8.5) for improved local and regional air quality in addition to renewing community livability. Implementation of the Specific Plan will allow the City to strive toward a development pattern that allows people to use transit, walk or bicycle to activity centers, such as the Downtown Village, Civic Center, shopping areas, schools, parks and employment areas.

AQ-2: The City shall improve local roads according to the Specific Plan as needed to maintain efficient traffic flow.

AQ-3: The City shall continue the implementation of the Lemon Grove Bikeway Master Plan Update to help improve regional air quality in addition to improving bicycle safety.

AQ-4: The City shall encourage local establishment of new businesses through by-right zoning offering high-quality jobs to allow residents to work locally and avoid excessive commutes.

AQ-5: The City shall review development proposals for potential construction and operation air quality impacts pursuant to the California Environmental Quality Act (CEQA) and the Regional Air Quality Strategy (RAQS) and evaluate compliance with regional clean air planning objectives. The City shall require the use of available technology, best management practices and land use and transportation planning techniques, as appropriate, including:

- Dust and vehicle emission control during construction;
- Incorporation of transit stops;
- Pedestrian and bicycle access and facilities, and linkages to other activity and transit centers;
- Traffic flow improvements; and/or
- Energy efficient equipment, site design and construction.

AQ-6: The City shall ensure development proposals include identification of asbestos and hazardous materials and require conformance with all applicable regulations for removal and containment of asbestos. City staff reviews the age of buildings to determine and mitigate potential environmental hazards.

AQ-7: The City shall ensure that all commercial and industrial operations in the City obtain all appropriate permits from the San Diego Air Pollution Control District. The City shall require documentation of necessary permits prior to issuing business permits.

AQ-8: The City shall participate in regional air quality planning and implement regional plans such as the Regional Air Quality Strategy and the Regional Growth Management Strategy in Lemon Grove. To ensure that new regional programs can be feasibly implemented and enforced by the local cities, the City shall participate in regional air quality planning processes.

AQ-9: The City shall undertake an aggressive program to encourage Lemon Grove commuters to utilize alternative transportation modes. The City shall publicize transit services including the location of transit centers and park-and-ride lots in the City newsletter and at public facilities. The City shall provide transit information at Lemon Grove City Hall for the purposes of displaying and distribution of transit maps and schedules, bike route maps and carpool promotional materials.

AQ-10: The City shall continue to support and participate in regional transportation planning programs through SANDAG committee representation and planning coordination with adjacent jurisdictions.

Cultural Resources

CR-1: Prior to demolition or remodeling of any building 50 years or older, under the supervision of a qualified historian and with the assistance of the Lemon Grove Historical Society, the City shall conduct a survey to identify significant historic and architectural resources. The survey shall include evaluating the significance according to the National Register of Historic Places criteria and the California Environmental Quality Act Guidelines. Historic resources identified by the Historical Society as having significance to the City's heritage shall also be identified based on carefully defined criteria. Redevelopment of such sites shall require a public hearing through a planned development permit and compliance with the adopted California Historical Building Code.

CR-2: Cultural and Paleontological Resource Monitoring shall be required during any ground disturbing activities, including grading operations, for any new development or redevelopment projects within the Specific Plan area.

CR-3: See section 5(b)

Geology and Soils

GEO-1: Projects undergoing ground disturbance are required to have a geotechnical soils report prepared with recommended mitigation measures by a professional engineer incorporated into the approved grading plans. This includes any redevelopment projects affected by unstable geologic units, earthquakes, soils with high shrink-swell potential and any soils within the Specific Plan area.

GEO-2: See section 6(c)

Greenhouse Gas Emissions

GHG-1: Implementation of the pedestrian and bicycle plans in the Specific Plans required with new development in the Specific Plan area will mitigate any GHG impacts.

Hazards and Hazardous Materials

HHC-1: See Section 3 a-c (AQ-6).

HHC-2: To reduce the number of potential injuries, the City shall minimize and control the concentrations of hazardous materials in areas where people congregate, such as neighborhoods, schools and shopping areas. The Fire Marshal reviews new development, land use and event proposals for hazardous materials and requires mitigation in accordance with the CA Fire Code.

HHC-3: When issuing business licenses, the City shall ensure that the appropriate permits to handle, transport, use and dispose of hazardous materials have been obtained from the regulatory agencies as required by the Fire Marshal and enforced in the CA Fire Code.

HHC-4: In coordination with the County Hazardous Materials Management Division (HMMD) and the Lemon Grove Fire Department, the City shall establish and enforce routes for the transport of hazardous materials. The routes should avoid areas where people congregate such as neighborhoods, schools and shopping areas. Enforce through the HMMD permit process and request monitoring by the Fire Department and Sheriff's Department.

HHC-5: The City shall implement the following actions:

- When redevelopment proposals are submitted, review historic uses of the project site and assess the potential for possible hazardous materials contamination. When soil disturbance is proposed, require the developer to obtain a Phase I Environmental Assessment and a Phase II Environmental Assessment if recommended in the Phase I to determine if historic land uses could have resulted in site contamination if a hazardous waste site exists, and require clean-up prior to commencement of construction.
- Each year the County Hazardous Materials Management Division (HMMD) informs the City about known hazardous waste sites. The City shall monitor the HMMD list and help coordinate clean-up efforts between HMMD and property owners. The City will check the HMMD list when reviewing development proposals.

HHC-6: The City shall implement the County of San Diego's Hazardous Waste Management Plan locally, and participate in future updates.

HHC-7: See section 8(a)

HHC-8: See section 8(a)

HHC-9: The City shall coordinate with the San Diego County Airport Land Use Commission (ALUC) for projects located within Montgomery Field Airport's Review Area 2 and Part 77 Airspace Surfaces and require new development to comply with ALUC policies and procedures.

Noise

NOI-1: The City shall use the noise and land use compatibility standards established in the Noise Element of the General Plan to guide future development within the Specific Plan area. The City shall consider both existing and future noise levels of the project site when considering noise compatibility, using the noise contours for 1995 and 2015 in the General Plan Noise Element. The City shall require measures to attenuate noise when needed to increase the compatibility of the proposed use with the noise environment.

NOI-2: The City shall review future residential development to assure that it complies with the California Noise Insulation Standards (Title 24, part 2, California Code of Regulation), which requires that interior noise levels for both single-family and multiple-family dwelling units equal 45 decibels dB(A) or less. Furthermore, noise studies shall be required for all proposed residential sites in close proximity to automotive traffic, rail or industrial development with baseline noise levels exceeding 60 dB(A) CNEL. The City shall require individual development projects to demonstrate that the interior noise level will equal 45 dB(A) or less.

NOI-3: The City shall review proposed development projects for noise impacts to determine if the surrounding noise conditions are incompatible with the proposed use, or if the proposed use will generate noise that impacts nearby sensitive noise receptors such as residences, schools, parks, churches and the library. A noise study shall be required with recommendations for mitigation to ensure interior noise levels are adhered to and exposure to and impacts from surrounding noise sources are minimized. For all identified impacts, the City shall require appropriate mitigation to reduce noise impacts to acceptable levels.

NOI-4: The City shall enforce Title 24 requirements in new residential development.

NOI-5: Working with the Metropolitan Transit Development Board, the City shall identify objectionable sources of trolley noise and appropriate measures to reduce noise, where feasible.

NOI-6: The City shall coordinate with the Sheriff's Department to ensure active enforcement of vehicle noise and speed laws.

NOI-7: The City shall enforce the Noise Abatement and Control Ordinance, particularly in residential neighborhoods, to maintain quiet and peaceful conditions except for permitted outdoor activities. The City shall, as necessary, revise the ordinance to address new noise concerns. The City shall educate the community about the noise ordinance to encourage both compliance and reporting of violations.

NOI-8: See section 12(a)

NOI-9: See section 12(a)

Public Services

PS-1: The City shall continue to use service standards to determine the adequacy of emergency fire protection services.

PS-2: In order to offset the costs associated with increased density and infrastructure improvements, the project applicants are required to complete a public services assessment through will serve letters on a project level and pay impact fees as appropriate.

PS-3: The City shall expand the Fire Department staff and upgrade equipment as needed to maintain the service standard and safeguard public safety. Also, the City shall upgrade equipment as needed to ensure the safety of Fire Department staff and protect the public from fire hazards.

PS-4: The City shall continue mutual aid agreements with the fire departments in the surrounding communities.

PS-5: The City shall continue to use service standards to determine adequacy of emergency law enforcement service. The standard is five minutes for priority one calls and eight minutes for priority two calls.

PS-6: When the City renews the service contract with the Sheriff's Department, the City shall analyze the contracted staffing levels to reflect local service standards, demographics and crime trends.

PS-7: In order to offset the costs associated with increased density and infrastructure improvements, the project applicant is required to complete a police services assessment on a project level basis and pay impact fees as appropriate for estimated impacts on services. A study may be prepared to estimate impacts based on proposed FAR and dwelling units by number of bedrooms to develop an impact fee or other mitigation for all development in the Plan area.

PS-8: All projects are reviewed for compliance with Crime Prevention Through Environmental Design principals. Providing for more people in the downtown allows for additional eyes in public and private spaces.

PS-9: The City shall help assess impacts to schools from new development projects and require developers to coordinate the payment of school impacts fees with the school districts.

PS-10: Developers of future projects within the Specific Plan area will be required to pay park impact fees or provide park land or facilities or a combination thereof to fund land acquisition and construction of park facilities (including land and improvements) at a rate of 1.5 acres per

projected 1,000 residents (total population times acreage in in the Downtown Specific Plan Area divided by acreage in the City divided by 1,000 and times 1.5).

Recreation

R-1: See Section 14.d.

Transportation/Traffic

TR-1: No development will be allowed above and beyond the intensity/density thresholds in Appendix E of the Specific Plan without additional traffic analysis and City review.

TR-2: The City shall require additional traffic analysis for each Zoning District that achieves a build-out of 75 percent of the land use area intensity/density thresholds for that District in Appendix E of the Specific Plan.

TR-3 City staff should obtain estimates for level of services as available by SANDAG and comprehensively review the Specific Plan circulation network every five years to analyze estimated LOS and projected LOS to see if there are discrepancies. If LOS is lower than anticipated, traffic analysis shall be a part of all new development projects where increased FAR or dwelling units are a part with appropriate mitigation included.

TR-4: *Massachusetts Avenue & Lemon Grove Plaza Shopping Center/Sr-94 Eastbound Ramps -*

- Restripe the northbound approach to a left turn lane, through lane, and trap right turn lane
- Restripe the westbound approach to a left turn lane, through lane, and a right turn lane with a Right-turn-overlap phase

TR-5: *Grove Street & Lemon Grove Way -*

- Signalization of the intersection

It should be noted that this impact could also be mitigated with the implementation of a single-lane roundabout. It is anticipated that this location could be an ideal fit based on the right-of-way boundaries.

TR-6: *Lemon Grove Avenue & Sr-94 Eastbound Ramps -*

- Signalization of the intersection

This signal should be coordinated with the signalized intersection to the south (Lemon Grove Avenue/North Avenue/Lemon Grove Way).

TR-7: *Lemon Grove Avenue & North Avenue/Lemon Grove Way -*

- Right-turn overlap for the southbound right turn movement

TR-8: *Lemon Grove Avenue & Golden Avenue -*

- Restrict westbound left turn movements during the AM and PM peak hours

This can be achieved via physical barriers (raised medians/pork-chop islands) and/or signage.

TR-9: *Lemon Grove Avenue & Lincoln Street -*

- Construct a raised median to restrict westbound left turn movements.

It should be noted a left turn can be made onto Lemon Grove Avenue by driving up School Lane and taking a left at Central Avenue. U-turns can also be made at the intersection of Lemon Grove Avenue/Central Avenue.

TR-10: *Kempf Street & Golden Avenue -*

- Signalization of the intersection

It should be noted this signal would require coordination with the traffic signal at the intersection of Broadway/Kempf Street.

TR-11: *Skyline Drive/Kempf Street & Lincoln Street -*

- Signalization of the intersection

TR-12: *Buena Vista Avenue & Central Avenue -*

- Signalization of the intersection

The segment of Central Avenue from Cypress Street to Olive Street is also anticipated to operate acceptably during the AM/PM peak periods with the proposed signalization of Buena Vista Avenue and Central Avenue. Widening this segment of Central Avenue to a Class II collector roadway is not feasible due to the existing properties fronting the segment.

TR-13: *North Avenue, B/W Buena Vista Avenue & Olive Street –*

- Widen roadway as necessary to provide a Class II Collector roadway.

TR-14: *Buena Vista Avenue, North of North Avenue –*

- Widen roadway as necessary to provide a Class II Collector roadway.

TR-15: *Buena Vista Avenue, B/W North Avenue & Broadway –*

- Widen roadway as necessary to provide a Class II Collector roadway.

Tribal Cultural Resources

TCR-1: see section 5(a)

TCR-2: see section 5(a)

Utilities and Service Systems

USS-1: Individual projects in the Specific Plan area are to complete a utilities and service systems analysis on a project level as required by the Lemon Grove Sanitation District, SDG&E, Helix Water District initiated by will-serve letters. Individual projects are to coordinate with Helix Water District, Lemon Grove Sanitation District, and the City to: 1) determine the increase in water/wastewater demand, and 2) identify the necessary infrastructure improvements and/or new facilities required for the specific project.

USS-2: Individual projects in the Specific Plan area are to complete drainage facilities assessments on a project level. Individual projects are to determine the increase in demand for drainage facilities as required by the City Engineer and 2) if applicable, identify the necessary infrastructure improvements and/or new facilities required for the specific project.

USS-3: Individual projects in the Specific Plan area are to complete a sanitary sewer and water service systems analysis on a project level if required by the Lemon Grove Sanitation District and Helix Water District respectively. 1) If applicable, Individual projects are to determine the increase in demand for wastewater facilities and 2) If applicable, identify the necessary infrastructure improvements and/or new facilities required for the specific project.

VI. Report Preparation and Consultations

This Initial Study/Mitigated Negative Declaration has been completed by:

City of Lemon Grove – Lead Agency

David DeVries	Planning Director, City of Lemon Grove
Mike Viglione	Assistant Planner, City of Lemon Grove
Brian Mooney FAICP	Project Principal, Rick Engineering
Danny Serrano AICP	Senior Planner, Rick Engineering
Spencer Richard	Planning Assistant, Rick Engineering
Mark Jugar	Traffic Engineer, Rick Engineering

APPENDIX A: TRAFFIC IMPACT STUDY

DRAFT

LEMON GROVE DOWNTOWN SPECIFIC PLAN
TRAFFIC IMPACT STUDY

MARCH 14, 2018

(JOB NUMBER 17670)

RICK ENGINEERING COMPANY

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DRAFT

LEMON GROVE DOWNTOWN SPECIFIC PLAN
TRAFFIC IMPACT STUDY
LEMON GROVE, CALIFORNIA

March 14, 2018

Prepared for:

City of Lemon Grove
3232 Main Street
Lemon Grove, CA 91945

Prepared by:

RICK
ENGINEERING COMPANY
Traffic Division

Job Number 17670

DRAFT
LEMON GROVE DOWNTOWN SPECIFIC PLAN
TRAFFIC IMPACT STUDY

March 14, 2018

INTRODUCTION

The following Traffic Impact Study (TIS) has been prepared by Rick Engineering Company (RICK) to evaluate traffic circulation and determine any traffic-related impacts due to the proposed changes in land uses within the Lemon Grove Downtown Specific Plan (LGDSP) area for year 2035 conditions. The LGDSP area is located entirely within the City of Lemon Grove and generally bounded to the north by State Route 94, to the east by Washington Street, to the south by Lincoln Street, and to the west by Massachusetts Street. The area covers approximately 219 gross acres and falls within a walkable distance to mass transit (trolley and bus service).

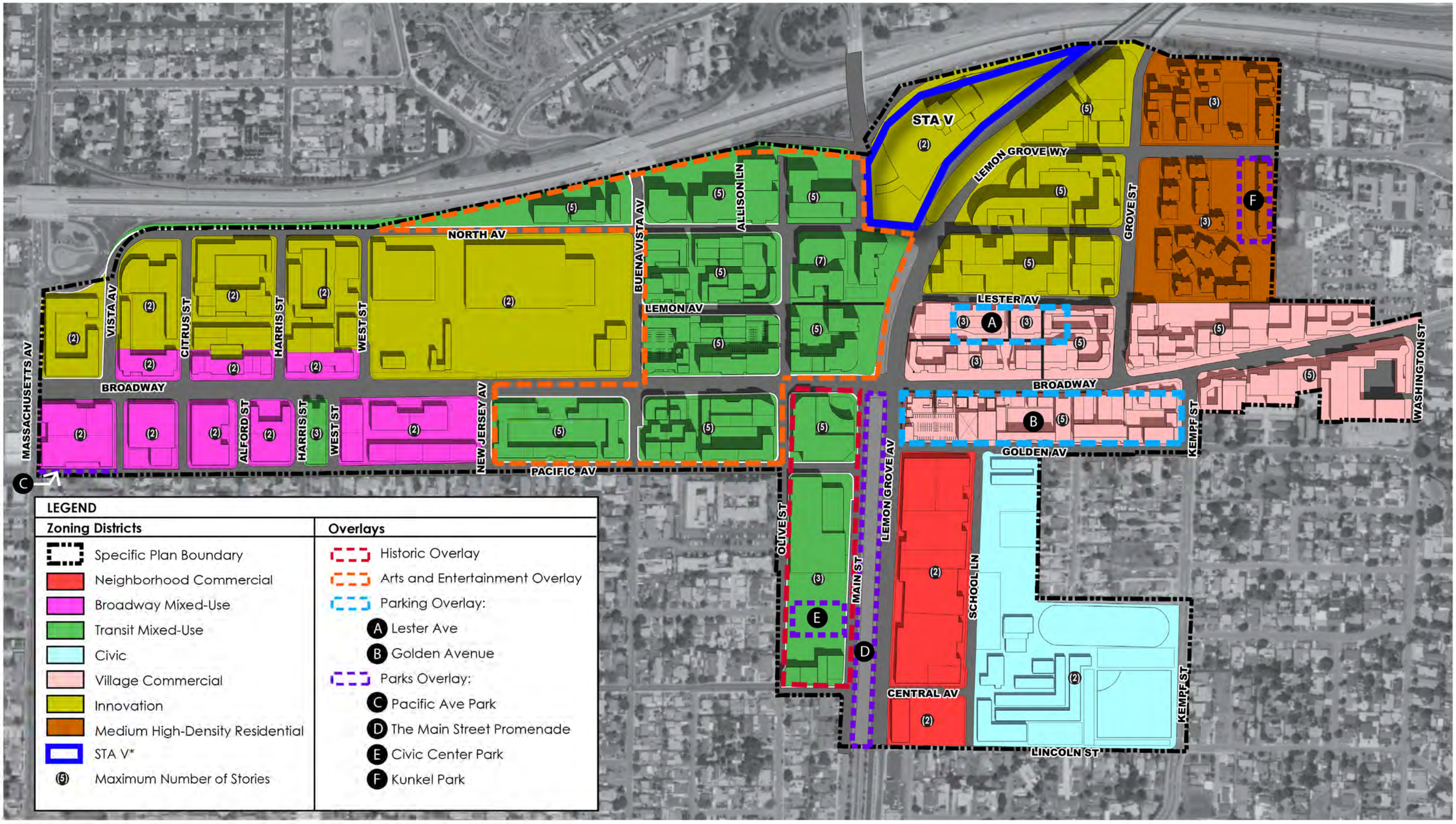
This TIS was prepared following the guideline outlined in the *SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region.*

PROJECT DESCRIPTION

In 2005, the City adopted the Downtown Village Specific Plan (2005 DVSP). In 2015, the City Council expressed interest in exploring new opportunities downtown and expanding the downtown plan. This Specific Plan area is approximately four times larger than the 2005 DVSP. A key goal of updating the 2005 DVSP and incorporating the larger area for the Specific Plan is to leverage development opportunities near the City's transit stations and to achieve goals related to economic development, place making and mobility that improve the City's public spaces and attract land uses that are ideal for families and professionals. The Specific Plan incorporates a variety of zoning districts, each with its own vision and set of land use and design regulations. In many instances, increased densities and intensities have been incorporated to stimulated growth and development. These districts are supported by a pedestrian oriented multi-modal circulation network.

The Specific Plan area also encompasses other Special Treatment Areas (STAs) that are identified in the General Plan, including the 2005 Downtown Village Specific Plan (STA I), Regional Commercial (STA III), and Automotive Sales District (STA V). The Specific Plan area will become the expanded STA I area. **Exhibit 1** shows the project area and zoning for the proposed LGDSP.

The purpose of the Lemon Grove Downtown Specific Plan is to provide guidance for future development of the downtown area. This Specific Plan is the primary document to guide land use decisions, regulate development and design standard requirements, improve the area's physical and economic environment, and establish the City's goals and expectations for downtown development.



*STA V is a part of the Innovation Zoning District.

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 1
PROJECT AREA & ZONING MAP
LEMON GROVE DOWNTOWN SPECIFIC PLAN

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EXISTING TRANSPORTATION CONDITIONS

The following is a brief description of the roadways within the project area.

Massachusetts Avenue is a divided roadway, running north to south within the study area and provides two vehicular travel lanes in each direction. The posted speed limit is 40 mph and parking is prohibited. Traffic signals are located at the intersections of SR-94 Eastbound Ramps and Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a 4-Lane Major Road and the roadway connects a variety of residential and commercial uses. It is also identified by the General Plan's Mobility Element as a pedestrian corridor, and potential truck route between SR-94 Westbound Ramps and Broadway.

Broadway is a divided roadway, running east to west within the study area and provides two vehicular travel lanes and a class II bike lane in each direction. The posted speed limit is 35 mph between Massachusetts Avenue and Buena Vista Avenue, 30 mph between Buena Vista Avenue and Kempf Street, and 40 mph between Kempf Street to Washington Street. Parking is generally prohibited, except the north side of the roadway between Kempf Street and Grove Street. Traffic signals are located at the intersections of Massachusetts Avenue, West Street, New Jersey Avenue, Buena Vista Avenue, Lemon Grove Avenue, Grove Street, Kempf Street and Washington Street. The San Diego Trolley Orange Line crosses Broadway at-grade just west of Lemon Grove Avenue. The Lemon Grove General Plan Mobility Element classifies this roadway as a 4-Lane Major Road and the roadway connects a variety of residential and commercial uses. It is also identified by the General Plan's Mobility Element as a pedestrian corridor and potential truck route.

Lemon Grove Avenue is a divided roadway, running north to south within the study area and provides two vehicular travel lanes and a class II bike lane in each direction. The posted speed limit is 35 mph southbound/25 mph northbound between North Avenue and Broadway, and 35 mph between Broadway and Lincoln Street. Parking is generally prohibited, except the east side of the roadway between North Avenue and Golden Avenue. Traffic signals are located at the intersections of North Avenue, Broadway and Central Avenue. The San Diego Trolley Orange Line runs parallel with the roadway and there are at grade crossings on the west legs of North Avenue, Broadway and Central Avenue. The Lemon Grove General Plan Mobility Element classifies this roadway as a 4-Lane Major Road and the roadway connects a variety of residential, commercial and civic uses. It is also identified by the General Plan's Mobility Element as a pedestrian corridor and potential truck route.

Phase 1 of the realignment of Lemon Grove Avenue and North Avenue is currently under construction and is expected to complete in March, 2018. The intent of this project is to allow vehicles traveling to/from the SR-94 to avoid the at-grade crossings at the intersections of Lemon Grove Avenue/North Avenue and Lemon Grove Avenue/Broadway. Phase 1 of the project includes the following improvements:

- The realignment of the Lemon Grove Avenue and North Avenue intersection to the west of the railroad tracks, between Lemon Grove Way and Olive Street
- Full improvements along North Avenue (from Olive Street to Lemon Grove Avenue) to a 5-lane Class 1 collector, North Avenue (from Lemon Grove Avenue to Lemon Grove Way) to a 6-lane Class 1 collector, and Lemon Grove Avenue (from North Avenue to the SR-94 eastbound ramps) to a 6-lane Major roadway

- Restriping along Olive Street to provide a Class II collector
- The signalization North Avenue/Olive Street, Lemon Grove Avenue/North Avenue and Olive Street/Broadway

An exhibit summarizing the improvements for Phase 1 of Lemon Grove Avenue Realignment project and the approved signing/striping plans are contained in **Appendix A**.

Phase 2 of this realignment project will widen the eastern side of Olive Street, between North Avenue to Broadway, and provide a 5-lane Class 1 collector roadway. Phase 2 of the realignment project is not currently scheduled for construction. Since there are many unknowns about the second phase of this project, the 2035 conditions analyzed assume construction of only the Phase 1 portion.

Main Street is an undivided roadway, running north to south within the study area and provides one vehicular travel lane in each direction. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies, and parking is generally permitted. The San Diego Trolley Orange Line crosses North Avenue at-grade just west of Lemon Grove Avenue. The Lemon Grove General Plan Mobility Element classifies this roadway as a Residential/Local Collector and the roadway connects a variety of residential, retail and civic uses.

Connect Main Street is a planned extension of the Main Street Promenade to the City's southern boundary. The extension is approximately 2 miles and will create a linear park within the existing public rights–of-way along or adjacent to Main Street, utility easement areas, and a drainage channel adjacent to the Trolley tracks. The Connect Main Street project will connect Lemon Grove residents to the City's Downtown Area and provide amenities for active transportation and recreation, including a Class I multi-use trail and pocket parks. The project will be phased over multiple years, with the ultimate buildout likely taking place after 2020.

North Avenue is an undivided roadway, running east to west within the study area and provides one vehicular travel lane in each direction. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies. Parking is generally prohibited and a traffic signal is located at the intersection of Buena Vista Avenue. The San Diego Trolley Orange Line crosses North Avenue at-grade just west of Lemon Grove Avenue. The Lemon Grove General Plan Mobility Element classifies this roadway as a Residential/Local Collector and the roadway connects a variety of residential, light manufacturing, and retail uses.

Buena Vista Avenue is an undivided roadway, running north to south within the study area and provides one vehicular travel lane in each direction. Class II bike lanes are provided in each direction between North Avenue and Broadway. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies. Parking is prohibited between North Avenue and Broadway and permitted south of Broadway. Traffic signals are located at the intersections of North Avenue and Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a Class III Collector north of Broadway and as a Residential/Local Collector south of Broadway. The roadway connects a variety of residential, light manufacturing, and retail uses.

Olive Street is an undivided roadway, running north to south within the study area and provides one vehicular travel lane in each direction. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies. Parking is generally permitted and a traffic signal is located at the intersection of Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a Residential/Local Collector and the roadway connects a variety of residential, commercial and civic uses.

Lemon Grove Way is an undivided roadway, running east to west within the study area and provides one vehicular travel lane in each direction. The posted speed limit is 30 mph and parking is generally permitted. There is a traffic signal located at the intersection of Lemon Grove Avenue. The Lemon Grove General Plan Mobility Element classifies this roadway as a Class III Collector and the roadway connects a variety of residential, light manufacturing, and retail uses.

Grove Street is an undivided roadway, running north to south within the study area and provides one vehicular travel lane and a class II bike lane in each direction. The posted speed limit is 35 mph and parking is generally permitted. There is a traffic signal located at the intersection of Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a Class II Collector and the roadway connects a variety of residential, light manufacturing, and retail uses.

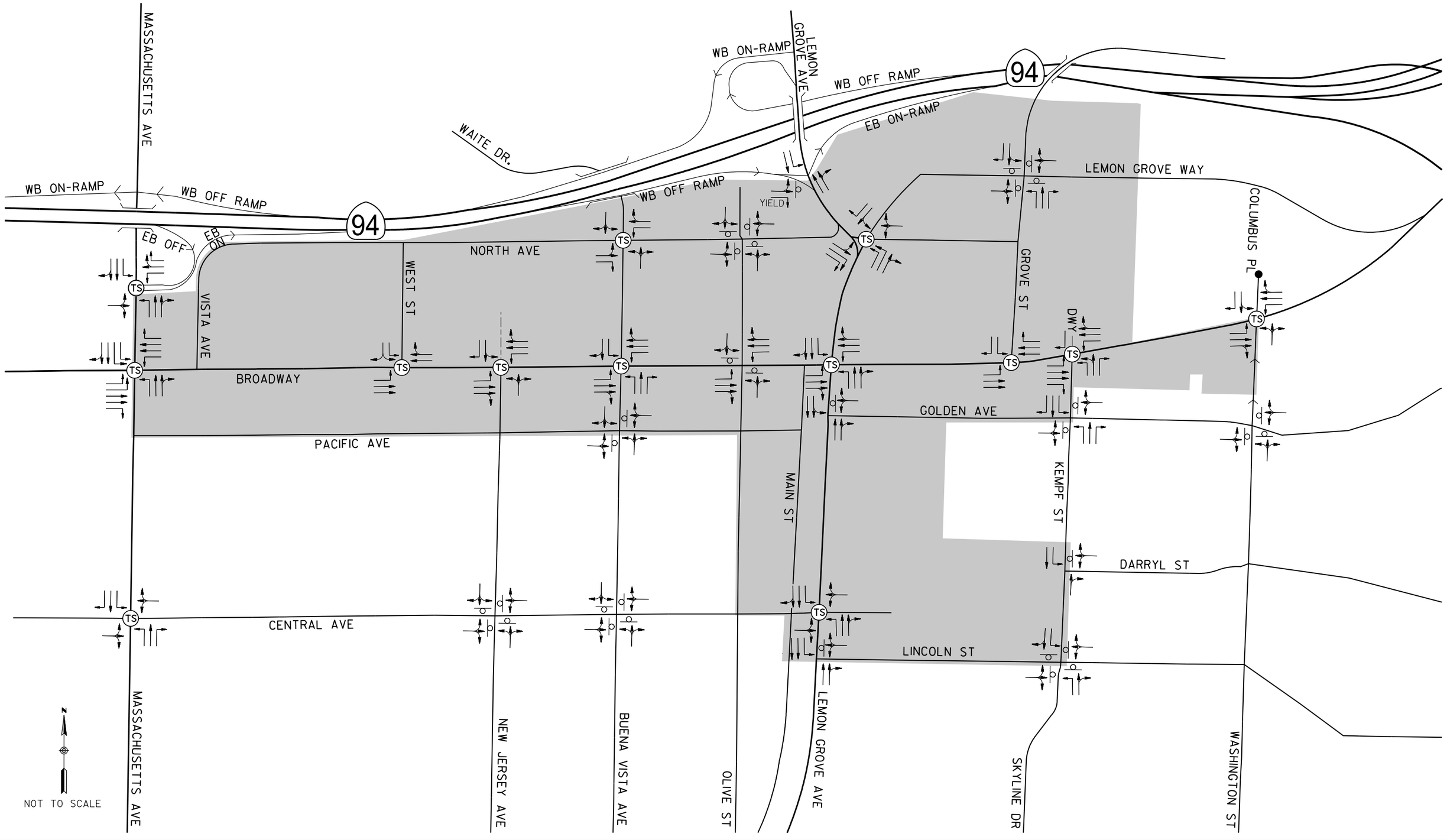
Kempf Street is an undivided roadway, running north to south within the study area and provides one vehicular travel lane in each direction, a class II bike lane in each direction, and a center two-way left turn lane. The posted speed limit is 35 mph and parking is prohibited. There is a traffic signal located at the intersection of Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a Class II Collector and the roadway connects a variety of residential and retail uses.

Vista Avenue is an undivided roadway, running north to south within the study area and provides one vehicular travel lane in each direction. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies. Parking is generally permitted and there is a traffic signal located at the intersection of Broadway. The Lemon Grove General Plan Mobility Element classifies this roadway as a Residential/Local Collector and the roadway connects a variety of residential and retail uses.

Pacific Avenue is an undivided roadway, running east to west within the study area and provides one vehicular travel lane in each direction. There is no posted speed limit currently so the "prima facie" speed limit of 25 mph applies. Parking is generally permitted. The Lemon Grove General Plan Mobility Element classifies this roadway as a Residential/Local Collector and the roadway connects a variety of residential and retail uses.

Central Avenue is an undivided roadway, running east to west within the study area and provides one vehicular travel lane in each direction. The posted speed limit is 30 mph and parking is generally permitted. The Lemon Grove General Plan Mobility Element classifies this roadway as a Class III Collector and the roadway connects a variety of residential, commercial and civic uses.

Exhibit 2 shows the existing transportation conditions and **Exhibit 3** shows the changes to the existing transportation conditions with the Lemon Grove Realignment Project.



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 2
EXISTING CONDITIONS
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
- = STOP SIGN
- = EXISTING LANE
- TS = TRAFFIC SIGNAL
- = LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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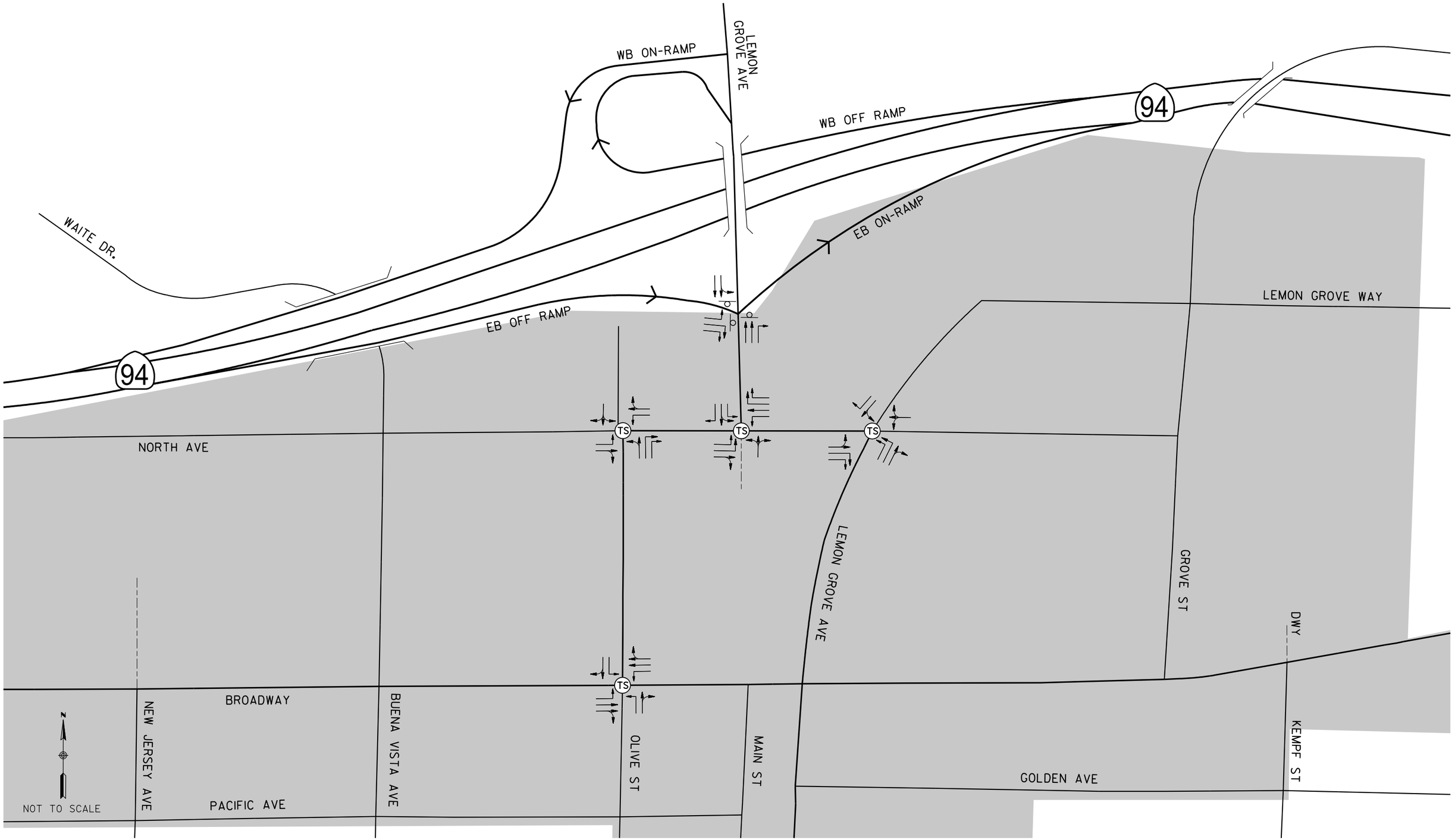

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 3
LEMON GROVE AVENUE REALIGNMENT CONDITIONS
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
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- = EXISTING LANE
- TS = TRAFFIC SIGNAL
- = LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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EXISTING TRAFFIC VOLUMES

Existing traffic volumes at the project area intersections and roadways were obtained from traffic counts conducted by Accurate Video Counts, Inc. between Thursday, March 3, 2016 and Sunday, March 13, 2016. The intersection vehicle and bicycle turning movement counts and pedestrian crossing counts were conducted during the AM (7-9) and PM (4-6) peak periods on a Thursday. **Exhibit 4** shows the existing weekday intersection turning movement volumes and average daily traffic volumes of vehicles within the study area. **Exhibit 5** shows the existing weekday intersection turning movement volumes of bicycles within the study area. **Exhibit 6** shows the existing weekday intersection crossing of pedestrians within the study area. **Appendix B** contains the traffic volume count sheets. It should be noted that local area schools were in session during the collection of these traffic volumes.

TRAFFIC ANALYSIS METHODOLOGY

The intersections and roadway segments within the project area were analyzed for the following scenarios:

- Existing (2016)
- 2035 without the LGDSP
- 2035 with the LGDSP

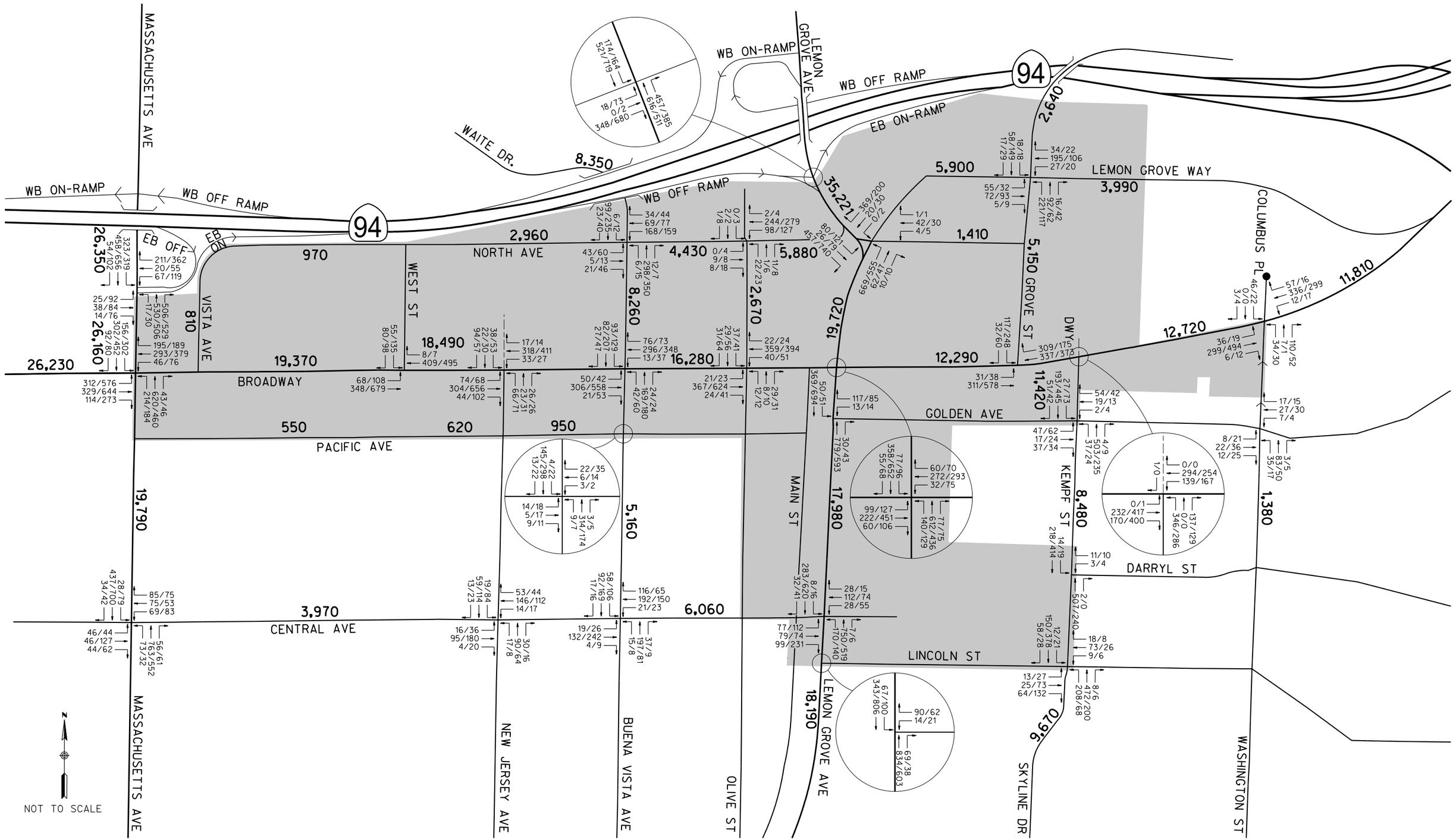
The level of service for signalized intersections was calculated using the methodologies described in Chapter 18 of the 2010 Highway Capacity Manual (HCM). The level of service for signalized intersections is defined in terms of control delay, which is made up of a number of factors that relate to right-of-way control, geometrics, traffic volumes, and incidents. The signalized intersection analysis also takes into account intersection spacing and coordination.

The level of service for unsignalized intersections was calculated using the methodologies described in Chapters 19 and 20 of the 2010 HCM. The level of service for an unsignalized (two-way stop controlled) intersection is determined by the computed control delay for each minor street movement and major street left-turns, and not for the intersection as a whole. The level of service for an unsignalized (all-way stop controlled) intersection is determined by the computed control delay for the intersection as a whole.

The level of service for roadway segments are determined by thresholds outlined on the Roadway Classification and Level of Service (LOS) Capacity Analysis table (Table M-2) in the Lemon Grove General Plan Mobility Element.

Level of Service A through D is considered acceptable for peak hour intersection operations. The project area intersections were analyzed during the AM and PM peak hours. **Appendix C** contains the 2010 HCM tables illustrating the LOS-to-delay relationship data for intersection operations.

The intersection level of service calculation sheets are contained in **Appendix D**.



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 4
EXISTING TRAFFIC VOLUMES
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
XX/XX = AM/PM PEAK VOLUMES
X,XXX = ADT
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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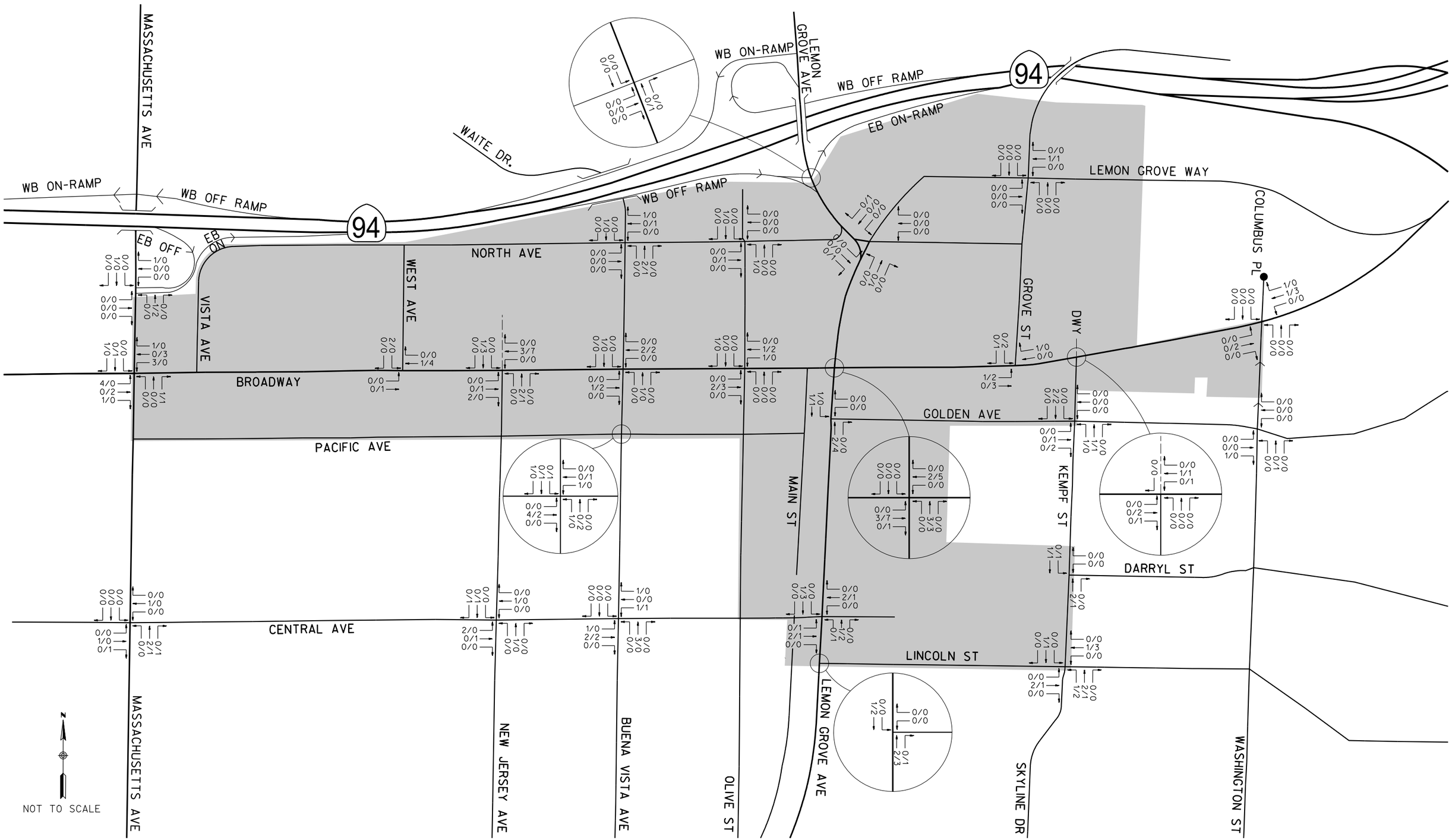

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 5
EXISTING BICYCLE VOLUMES
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLANS

LEGEND
XX/XX = AM/PM PEAK VOLUMES
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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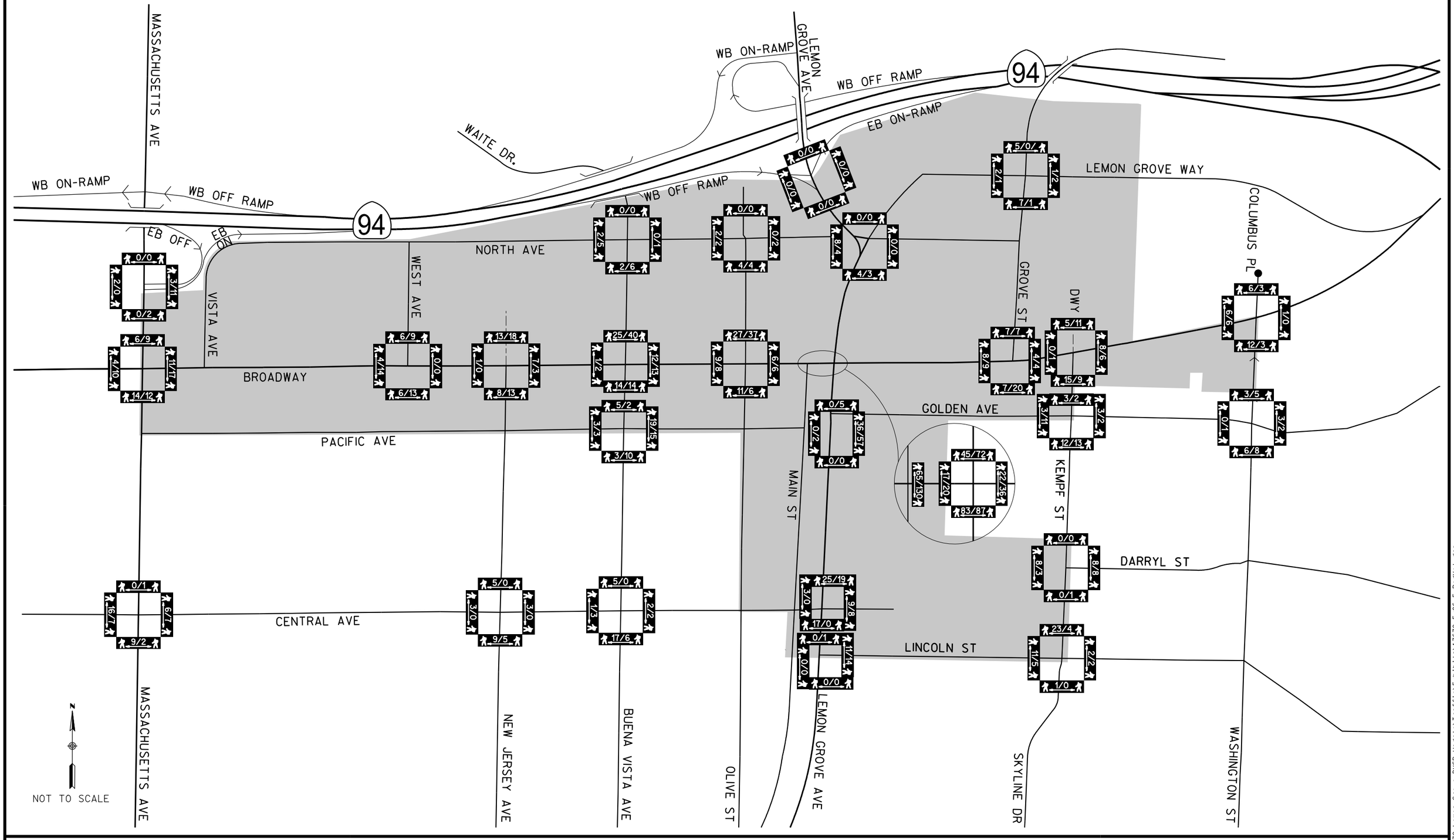

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 6
EXISTING PEDESTRIAN VOLUMES
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

LEGEND
XX/XX = AM/PM PEAK VOLUMES
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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SIGNIFICANCE IMPACT CRITERIA

The following significance impact criteria and significance thresholds apply to the roadway facilities and intersections within the City of Lemon Grove and are based on the guidelines outlined in the *SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region*.

For intersections and roadway segments affected by a project, level of service (LOS) D or better is considered acceptable. If a proposed project's traffic causes the level of service to deteriorate from LOS D or better to LOS E or worse, the impacts are determined to be significant if the following values are exceeded:

- For intersections, the impacts are determined to be significant if project traffic causes an incremental delay of greater than or equal to 2.0 seconds between the no build and build scenarios.
- For roadways, the impacts are determined to be significant if the project traffic causes an increase in the Volume to Capacity ratio (V/C) of more than 0.02 between the no build and build scenarios.

The *SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region* are contained in **Appendix E**.

EXISTING (2016) TRAFFIC OPERATIONS

Intersection Operations

Existing traffic operations were analyzed for twenty-two (22) intersections within the project boundary and four (4) intersections outside the project boundary. **Table 1** shows that all study area intersection operate at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM Peak; LOS F, PM Peak)
- Massachusetts Avenue & Broadway (LOS E, PM Peak)
- Broadway & Olive Street (NB LOS E, PM Peak; SB LOS E, AM Peak; SB LOS F, PM Peak)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (EBL LOS E, AM Peak; EB LOS F PM Peak)
- Kempf Street & Golden Avenue (EB LOS F, AM/PM Peaks)

Roadway Segment Operations

Existing traffic operations were analyzed for twenty-eight (28) roadway segments within the project boundary and nine (9) roadway segments outside the project boundary. **Table 2** shows that all study area roadway segments operate at Level of Service (LOS) D or better with the exception of Lemon Grove Avenue, between North Avenue and SR-94 Eastbound Ramps (LOS E).

RICK ENGINEERING COMPANY
Traffic Division

TABLE 1
EXISTING INTERSECTION OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

No.	Intersection	Existing			
		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	**77.5**	**E**	**80.1**	**F**
2	Massachusetts Avenue & Broadway (Signalized)	52.5	D	**60.1**	**E**
3*	Massachusetts Avenue & Central Avenue (Signalized)	23.3	C	29.0	C
4	Broadway & West Avenue (Signalized)	11.3	B	12.7	B
5	New Jersey Avenue/Home Depot Driveway & Broadway (Signalized)	15.4	B	10.9	B
6	Buena Vista Avenue & Broadway (Signalized)	22.7	C	22.1	C
7	Olive Street & Broadway (Unsignalized)				
	EB L	8.4	A	8.5	A
	WB L	8.5	A	9.7	A
	NB LTR	16.3	C	**45.5**	**E**
	SB LTR	**37.4**	**E**	**> 50**	**F**
8	Lemon Grove Avenue & Broadway (Signalized)	**66.0**	**E**	42.1	D
10	Broadway & Grove Street (Signalized)	10.1	B	13.9	B
11	Kempf Street/Driveway & Broadway (Signalized)	23.7	C	16.1	B
12	Washington Street/Columbus Place & Broadway (Signalized)	25.8	C	15.6	B
13	Buena Vista Avenue & North Avenue (Signalized)	15.4	B	16.0	B
14	Olive Street & North Avenue (Unsignalized)				
	OVERALL	10.5	B	11.7	B
15	Grove Street & Lemon Grove Way (Unsignalized)				
	OVERALL	14.6	B	11.4	B
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)				
	EB L	**49.2**	**E**	**>50**	**F**
	EB R	33.2	D	**>50**	**F**
	SB L	10.4	B	11.9	B
	OVERALL	-	-	-	-
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	28.0	C	24.6	C
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)				
	WB LR	25.3	D	16.9	C
	SB L	10.8	B	9.5	A
19	Lemon Grove Avenue & Central Avenue (Signalized)	24.5	C	29.1	C
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)				
	WB LR	27.4	D	22.7	C
	SB L	11.7	B	9.8	A
21	Kempf Street & Golden Avenue (Unsignalized)				
	EB LTR	**> 50**	**F**	**> 50**	**F**
	WB LTR	22.9	C	17.7	C
	NB L	7.9	A	8.5	A
	SB L	8.8	A	8.0	A
22	Kempf Street & Darryl Street (Unsignalized)				
	WB LR	12.9	B	10.9	B
	SB L	8.7	A	7.8	A
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)				
	OVERALL	30.8	D	17.8	C
24*	Washington Street & Golden Avenue (Unsignalized)				
	OVERALL	7.9	A	7.7	A
25	Buena Vista Avenue & Pacific Avenue (Unsignalized)				
	EB LTR	14.6	B	17.5	C
	WB LTR	12.8	B	13.6	B
	NB L	7.7	A	8.1	A
	SB L	8.2	A	7.8	A
26*	New Jersey Avenue & Central Avenue (Unsignalized)				
	OVERALL	9.6	A	12.8	B
27*	Buena Vista Avenue & Central Avenue (Unsignalized)				
	OVERALL	23.5	C	16.0	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

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RICK ENGINEERING COMPANY
Traffic Division

TABLE 2
EXISTING ROADWAY SEGMENT OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

	Street Segment	Roadway Classification	LOS D Capacity	Existing	
				ADT	LOS
	Massachusetts Avenue				
1	b/w SR-94 WB and SR-94 EB Ramps	4-Lane Major	33,400	26,348	C
2	b/w SR-94 EB Ramps and Broadway	4-Lane Major	33,400	26,163	C
3*	b/w Pacific Ave and Westview Pl	4-Lane Major	33,400	19,794	B
	Broadway				
4*	West of Massachusetts Ave	4-Lane Major	33,400	26,232	C
5	b/w Citrus St and Alford St	4-Lane Major	33,400	19,367	B
6	b/w West St and New Jersey Ave	4-Lane Major	33,400	18,492	B
7	b/w Buena Vista Ave and Olive St	4-Lane Major	33,400	16,284	B
8	b/w Lemon Grove Ave and Grove St	4-Lane Major	33,400	12,290	A
9	b/w Kempf St and Columbus Pl	4-Lane Major	33,400	12,723	A
10*	b/w Columbus Pl and Lemon Grove Way	4-Lane Major	33,400	11,809	A
	Lemon Grove Avenue				
11	b/w Broadway and Lester Ave	4-Lane Major	33,400	19,717	B
12	b/w North Ave and SR-94 EB Ramps	4-Lane Major	33,400	**35,221**	**E**
	REALIGNMENT IMPROVEMENTS	6-Lane Prime	55,000	-	-
13	b/w North Ave and Grove St	4-Lane Major	33,400	5,904	A
	North Avenue				
14	b/w Lemon Grove Ave and Grove St	Residential/Local Collector	6,500	1,412	A
15	b/w Olive St and Citronica Driveway	Residential/Local Collector	6,500	5,878	D
	REALIGNMENT IMPROVEMENTS	5-Lane Class I Collector	24,800	-	-
16	b/w Buena Vista Ave and Olive St	Residential/Local Collector	6,500	4,434	C
17	b/w West St and Buena Vista Ave	Residential/Local Collector	6,500	2,961	A
	Buena Vista Avenue				
18	North of North Ave	Class III Collector	9,000	8,352	D
19	b/w North Ave and Broadway	Class III Collector	9,000	8,255	D
	Olive Street				
20	b/w Lemon Ave and Broadway	Residential/Local Collector	6,500	2,665	A
	REALIGNMENT IMPROVEMENTS	Class II Collector	2,000	-	-
	Lemon Grove Way				
21	East of Grove Ct	Class III Collector	9,000	3,987	A
	Grove Street				
22	North of Lemon Grove Way	Class II Collector	20,000	2,644	A
23	b/w North Ave and Lester Ave	Class II Collector	20,000	5,154	A
	Kempf Street				
24	b/w Broadway and Golden Ave	Class II Collector	20,000	11,417	B
25	b/w Roy St and Adams St	Class II Collector	20,000	8,477	B
	Skyline Drive				
26*	South of Lincoln St	Class II Collector	20,000	9,674	B
	Washington Street				
27*	b/w Golden Ave and Roy St	Class III Collector	9,000	1,377	A
	Lemon Grove Avenue				
28	b/w Central Ave and Golden Ave	4-Lane Major	33,400	17,981	B
29*	South of Lincoln St	4-Lane Major	33,400	18,194	B
	Buena Vista Avenue				
30*	b/w Church St and Central St	Class III Collector	9,000	5,163	C
	Vista Avenue				
31	b/w Broadway and North Ave	Residential/Local Collector	6,500	808	A
	North Avenue				
32	b/w Citrus St and Alford St	Residential/Local Collector	6,500	965	A
	Pacific Avenue				
33	b/w Citrus St and Alford St	Residential/Local Collector	6,500	549	A
34	b/w West St and New Jersey Ave	Residential/Local Collector	6,500	615	A
35	b/w New Jersey Ave and Buena Vista Ave	Residential/Local Collector	6,500	951	A
	Central Avenue				
36*	b/w Citrus St and New Jersey Ave	Class III Collector	9,000	3,974	A
37*	b/w Cypress Ave and Olive St	Class III Collector	9,000	6,061	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

Note:
4-Lane Major LOS D Capacity - 33,400
Class II Collector LOS D Capacity - 20,000
Class III Collector LOS D Capacity - 9,000
Residential/Local Collector LOS D Capactiy - 6,500
Roadway Segments classified per City of Lemon Grove Downtown Village Specific Plan, Amended April 2012.

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YEAR 2035 WITHOUT DOWNTOWN SPECIFIC PLAN VOLUMES

The 2035 ADTs and intersection turning movement volumes were derived by, first, adjusting the existing traffic volumes based on anticipated shift in traffic due to Phase 1 Lemon Grove Realignment project. **Appendix F** contains an exhibit that graphically shows the adjusted traffic volumes.

Growth factors were determined by a comparing growth rates between the SANDAG Series 13 for year 2020 with the SANDAG Series 13 Forecast for year 2035 at selected roadway segments throughout the Downtown Specific Plan area. It was determined that these growth rates vary based on their geographical location. These growth rates varied from 0.27% to 0.75% per year depending on the area. Once these growth rates were determined, the growth factor was applied to the realignment ADTs to calculate the 2035 ADT's without the Downtown Specific Plan project. After the determination of these 2035 ADT's, the intersection turning movements were forecasted. **Appendix G** contains the year 2035 without LGDSP forecasted intersection turning movement volumes calculations.

Table 3 shows the area to generate 39,000 ADT for the 2035 No Build Condition. **Appendix H** provides a more detailed trip generation summary for 2035 No Build conditions and the Series 13 2035 No Build Forecast.

Exhibit 7 shows the 2035 background intersection turning movement volumes and average daily traffic volumes of vehicles within the study area.

YEAR 2035 WITHOUT DOWNTOWN SPECIFIC PLAN TRAFFIC OPERATIONS

Intersection Operations

Traffic operations for year 2035 without the implementation of the proposed LGDSP were analyzed for same twenty-two (22) intersections within the project boundary and four (4) intersections outside the project boundary. **Table 4** shows that all study area intersection operate at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM/PM Peaks)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (LOS F, AM/PM Peaks)
- Lemon Grove Avenue & North Avenue/Lemon Grove Way (LOS F, AM Peak)
- Kempf Street & Golden Avenue (EB LOS F, PM Peak)

Roadway Segment Operations

Traffic operations for year 2035 without the implementation of the proposed LGDSP were analyzed for same twenty-eight (28) roadway segments within the project boundary and nine (9) roadway segments outside the project boundary. **Table 5** shows that all study area roadway segments operate at Level of Service (LOS) D or better with the exception the following segments:

RICK ENGINEERING COMPANY
Traffic Division

TABLE 3
2035 NO BUILD TRAFFIC GENERATION
LEMON GROVE DOWNTOWN SPECIFIC PLAN

TAZ Zone	2035 No Build ADT
3616	1500
3612	2700
3638	2600
3636	4700
3567	8600
3577	7100
3588	4800
3559	800
3562	2500
3558	3700
Total:	**39000**

Source: SANDAG Series 13 Forecast

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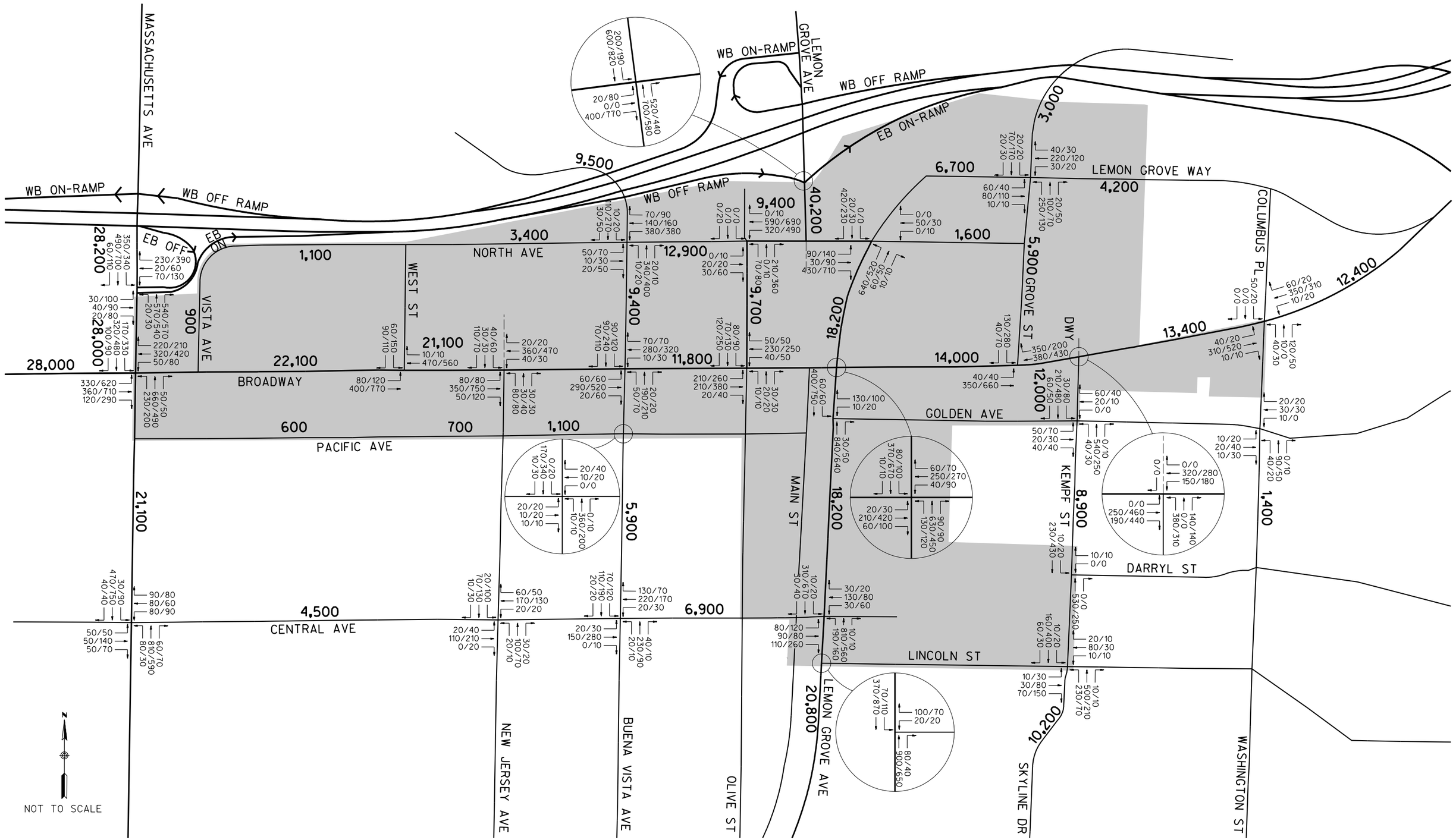

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 7
2035 NO BUILD TRAFFIC VOLUMES
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
XX/XX = AM/PM PEAK VOLUMES
X,XXX = ADT
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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RICK ENGINEERING COMPANY
Traffic Division

TABLE 4
2035 NO BUILD INTERSECTION OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

No.	Intersection	2035			
		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	**62.3**	**E**	**78.9**	**E**
2	Massachusetts Avenue & Broadway (Signalized)	42.4	D	49.4	D
3*	Massachusetts Avenue & Central Avenue (Signalized)	21.3	C	29.8	C
4	Broadway & West Avenue (Signalized)	10.4	B	11.8	B
5	New Jersey Avenue/Home Depot Driveway & Broadway (Signalized)	14.9	B	10.0	A
6	Buena Vista Avenue & Broadway (Signalized)	20.4	C	20.9	C
7	Olive Street & Broadway (Unsignalized)	SIGNALIZED WITH REALIGNMENT			
	EB L WB L NB LTR SB LTR	26.1	C	26.1	C
8	Lemon Grove Avenue & Broadway (Signalized)	34.9	C	34.7	C
10	Broadway & Grove Street (Signalized)	9.9	A	13.5	B
11	Kempf Street/Driveway & Broadway (Signalized)	24.1	C	23.4	C
12	Washington Street/Columbus Place & Broadway (Signalized)	13.8	B	7.9	A
13	Buena Vista Avenue & North Avenue (Signalized)	15.9	B	18.2	B
14	Olive Street & North Avenue (Unsignalized)	SIGNALIZED WITH REALIGNMENT			
	OVERALL	22.1	C	26.7	C
15	Grove Street & Lemon Grove Way (Unsignalized)				
	OVERALL	14.8	B	11.7	B
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)	ALL WAY STOP WITH REALIGNMENT			
	EB L EB R SB L	-	-	-	-
	OVERALL	**65.9**	**F**	**165.8**	**F**
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	**84.9**	**F**	48.0	D
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)				
	WB LR	19.1	C	20.6	C
	SB L	10.7	B	9.7	A
19	Lemon Grove Avenue & Central Avenue (Signalized)	22.2	C	28.7	C
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)				
	WB LR	24.3	C	23.6	C
	SB L	11.3	B	9.9	A
21	Kempf Street & Golden Avenue (Unsignalized)				
	EB LTR	31.9	D	**52.0**	**F**
	WB LTR	16.8	C	13.2	B
	NB L	7.8	A	8.6	A
	SB L	8.8	A	8.0	A
22	Kempf Street & Darryl Street (Unsignalized)				
	WB LR	12.3	B	9.9	A
	SB L	8.7	A	7.9	A
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)				
	OVERALL	22.1	C	19.0	C
24*	Washington Street & Golden Avenue (Unsignalized)				
	OVERALL	7.8	A	7.5	A
25	Buena Vista Avenue & Pacific Avenue (Unsignalized)				
	EB LTR	14.2	B	16.9	C
	WB LTR	12.5	B	12.6	B
	NB L	7.7	A	8.2	A
	SB L	0.0	A	7.8	A
26*	New Jersey Avenue & Central Avenue (Unsignalized)				
	OVERALL	9.7	A	12.0	B
27*	Buena Vista Avenue & Central Avenue (Unsignalized)				
	OVERALL	16.3	C	16.7	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

RICK ENGINEERING COMPANY
Traffic Division

TABLE 5
2035 NO BUILD ROADWAY SEGMENT OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

	Street Segment	Roadway Classification	LOS D Capacity	2035	
				NO BUILD	LOS
	Massachusetts Avenue				
1	b/w SR-94 WB and SR-94 EB Ramps	4-Lane Major	33,400	28,200	C
2	b/w SR-94 EB Ramps and Broadway	4-Lane Major	33,400	28,000	C
3*	b/w Pacific Ave and Westview Pl	4-Lane Major	33,400	21,100	B
	Broadway				
4*	West of Massachusetts Ave	4-Lane Major	33,400	28,000	C
5	b/w Citrus St and Alford St	4-Lane Major	33,400	22,100	B
6	b/w West St and New Jersey Ave	4-Lane Major	33,400	21,100	B
7	b/w Buena Vista Ave and Olive St	4-Lane Major	33,400	11,800	A
8	b/w Lemon Grove Ave and Grove St	4-Lane Major	33,400	14,000	A
9	b/w Kempf St and Columbus Pl	4-Lane Major	33,400	13,400	A
10*	b/w Columbus Pl and Lemon Grove Way	4-Lane Major	33,400	12,400	A
	Lemon Grove Avenue				
11	b/w Broadway and Lester Ave	4-Lane Major	33,400	18,200	B
12	b/w North Ave and SR-94 EB Ramps	4-Lane Major	33,400	40,200	-
	REALIGNMENT IMPROVEMENTS	6-Lane Prime	55,000	40,200	B
13	b/w North Ave and Grove St	4-Lane Major	33,400	6,700	A
	North Avenue				
14	b/w Lemon Grove Ave and Grove St	Residential/Local Collector	6,500	1,600	A
15	b/w Olive St and Citronica Driveway	Residential/Local Collector	6,500	9,400	-
	REALIGNMENT IMPROVEMENTS	5-Lane Class I Collector	24,800	9,400	A
16	b/w Buena Vista Ave and Olive St	Residential/Local Collector	6,500	**12,900**	**F**
17	b/w West St and Buena Vista Ave	Residential/Local Collector	6,500	3,400	A
	Buena Vista Avenue				
18	North of North Ave	Class III Collector	9,000	**9,500**	**E**
19	b/w North Ave and Broadway	Class III Collector	9,000	**9,400**	**E**
	Olive Street				
20	b/w Lemon Ave and Broadway	Residential/Local Collector	6,500	9,700	-
	REALIGNMENT IMPROVEMENTS	Class II Collector	2,000	9,700	A
	Lemon Grove Way				
21	East of Grove Ct	Class III Collector	9,000	4,200	A
	Grove Street				
22	North of Lemon Grove Way	Class II Collector	20,000	3,000	A
23	b/w North Ave and Lester Ave	Class II Collector	20,000	5,900	A
	Kempf Street				
24	b/w Broadway and Golden Ave	Class II Collector	20,000	12,000	C
25	b/w Roy St and Adams St	Class II Collector	20,000	8,900	B
	Skyline Drive				
26*	South of Lincoln St	Class II Collector	20,000	10,200	B
	Washington Street				
27*	b/w Golden Ave and Roy St	Class III Collector	9,000	1,400	A
	Lemon Grove Avenue				
28	b/w Central Ave and Golden Ave	4-Lane Major	33,400	18,200	B
29*	South of Lincoln St	4-Lane Major	33,400	20,800	B
	Buena Vista Avenue				
30*	b/w Church St and Central St	Class III Collector	9,000	5,900	C
	Vista Avenue				
31	b/w Broadway and North Ave	Residential/Local Collector	6,500	900	A
	North Avenue				
32	b/w Citrus St and Alford St	Residential/Local Collector	6,500	1,100	A
	Pacific Avenue				
33	b/w Citrus St and Alford St	Residential/Local Collector	6,500	600	A
34	b/w West St and New Jersey Ave	Residential/Local Collector	6,500	700	A
35	b/w New Jersey Ave and Buena Vista Ave	Residential/Local Collector	6,500	1,100	A
	Central Avenue				
36*	b/w Citrus St and New Jersey Ave	Class III Collector	9,000	4,500	A
37*	b/w Cypress Ave and Olive St	Class III Collector	9,000	6,900	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

Note:
4-Lane Major LOS D Capacity - 33,400
Class II Collector LOS D Capacity - 20,000
Class III Collector LOS D Capacity - 9,000
Residential/Local Collector LOS D Capactiy - 6,500
Roadway Segments classified per City of Lemon Grove Downtown Village Specific Plan, Amended April 2012.

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- North Avenue, between Buena Vista Avenue and Olive Street (LOS F)
- Buena Vista Avenue, north of North Avenue
- Buena Vista Avenue, between Lemon Avenue and Broadway

DOWNTOWN SPECIFIC PLAN TRAFFIC GENERATION

The total traffic generated by the Downtown Specific Plan was determined based on a Series 13 Model Runs for 2035 No Build and 2035 Build conditions. The 2035 No Build model was prepared by SANDAG based on the on the current data for land uses, existing traffic, roadway network, intersection controls, populations, employment, shopping, etc. The 2035 Build model was prepared by SANDAG based on coordination with RICK for the proposed land use inputs. See **Appendix I** for models provided by SANDAG. RICK provided SANDAG with a breakdown of removed and proposed land uses broken down by Master Geographic Reference Area (MGRA) within the Downtown Specific Plan area. These land use breakdowns are contained in **Appendix J**.

In total, there are ten (10) TAZ zones with proposed changes to the land uses. The trips generated by each zone for both build and no build conditions can be identified by a review of the daily traffic volumes on the Zone Connectors. **Table 6** shows the area to generate 122,500 ADT for the 2035 with specific plan condition. **Appendix K** provides a more detailed trip generation summary and the Series 13 2035 with Specific Plan Forecast.

The traffic generated due to the Downtown Specific Plan can be determined based on a comparison of these SANDAG Series 13 models. After a review of the trips generated along the Zone Connectors for both build and no build models, it is determined that the Downtown Specific Plan will add an additional 83,500 (122,500 – 39,000) daily vehicle trips to the roadway network.

YEAR 2035 WITH DOWNTOWN SPECIFIC PLAN VOLUMES

The traffic volumes for year 2035 with the implementation of LGDSP are derived by adding the change in roadway ADTs between the 2035 no build model and the 2035 LGDSP model to the year 2035 without LGDSP volumes. **Appendix L** contains the year 2035 with LGDSP forecasted intersection turning movement volumes calculations.

Exhibit 8 shows the 2035 intersection turning movement volumes and average daily traffic volumes of vehicles within the study area with the implementation of the Downtown Specific Plan.

YEAR 2035 WITH DOWNTOWN SPECIFIC PLAN TRAFFIC OPERATIONS

Intersection Operations

Traffic operations for year 2035 with the implementation of the proposed LGDSP were analyzed for same twenty-five (25) intersections within the project boundary and two (2) intersections outside the project boundary. **Table 7** shows that all study area intersection operate at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

RICK ENGINEERING COMPANY
Traffic Division

TABLE 6
2035 WITH SPECIFIC PLAN TRAFFIC GENERATION
LEMON GROVE DOWNTOWN SPECIFIC PLAN

TAZ Zone	2035 with Specific Plan ADT
3616	19200
3612	20500
3638	17400
3636	12300
3567	29700
3577	8700
3588	10100
3559	800
3562	1300
3558	2500
Total:	**122500**

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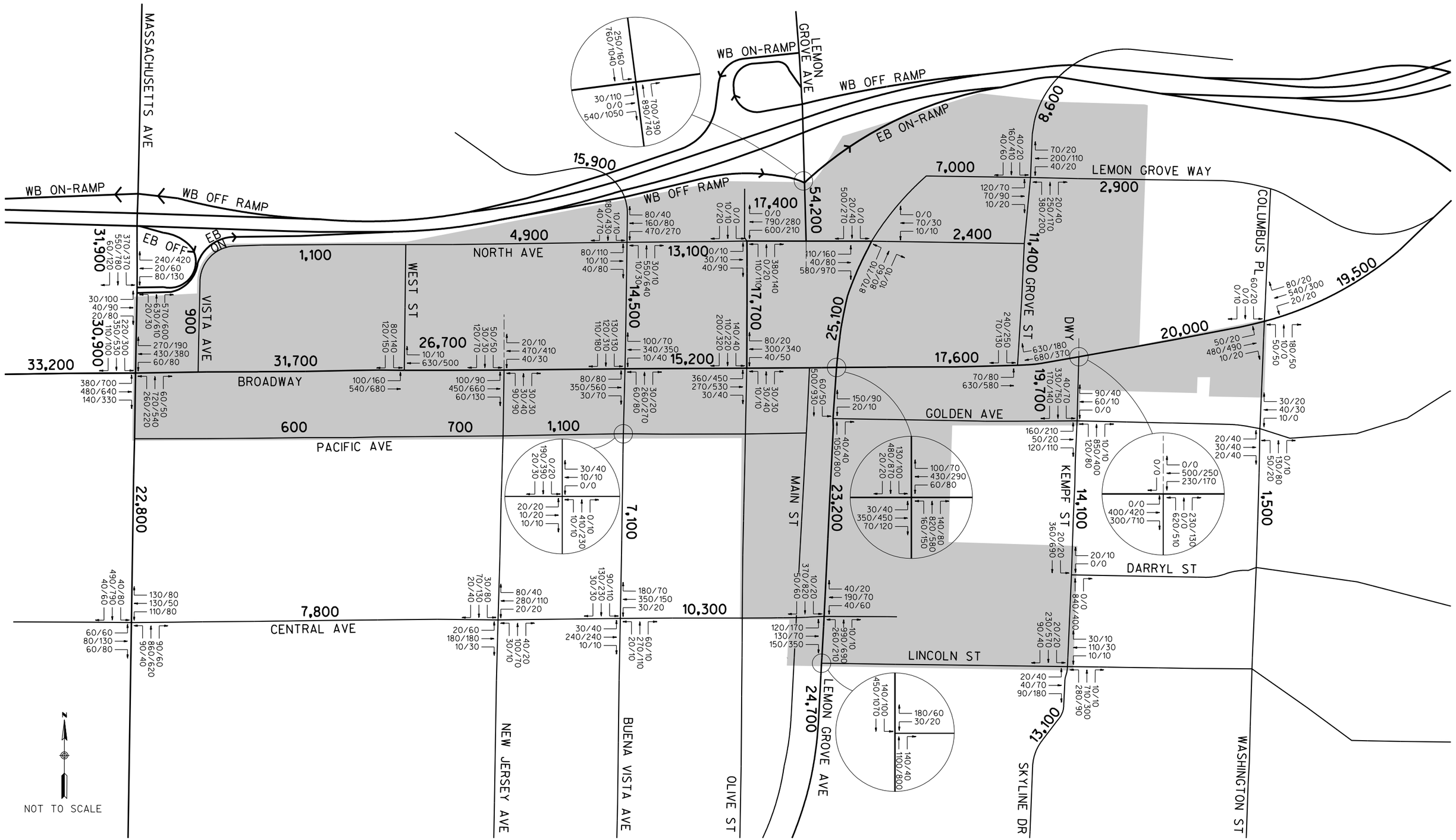

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RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

EXHIBIT 8
2035 WITH DOWNTOWN SPECIFIC PLAN TRAFFIC VOLUMES
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
XX/XX = AM/PM PEAK VOLUMES
X,XXX = ADT
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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Traffic Division

TABLE 7
2035 WITH SPECIFIC PLAN INTERSECTION OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

No.	Intersection	2035 Specific Plan			
		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	**70.7**	**E**	**94.7**	**F**
2	Massachusetts Avenue & Broadway (Signalized)	50.9	D	50.4	D
3*	Massachusetts Avenue & Central Avenue (Signalized)	30.5	C	23.2	C
4	Broadway & West Avenue (Signalized)	10.1	B	13.1	B
5	New Jersey Avenue/Home Depot Driveway & Broadway (Signalized)	16.0	B	12.8	B
6	Buena Vista Avenue & Broadway (Signalized)	23.8	C	30.2	C
7	Olive Street & Broadway (Unsignalized)	SIGNALIZED WITH REALIGNMENT			
	EB L WB L NB LTR SB LTR	32.4	C	44.4	D
8	Lemon Grove Avenue & Broadway (Signalized)	44.4	D	39.7	D
10	Broadway & Grove Street (Signalized)	9.9	A	12.5	B
11	Kempf Street/Driveway & Broadway (Signalized)	16.9	B	13.7	B
12	Washington Street/Columbus Place & Broadway (Signalized)	15.3	B	20.2	C
13	Buena Vista Avenue & North Avenue (Signalized)	33.0	C	23.5	C
14	Olive Street & North Avenue (Unsignalized)	SIGNALIZED WITH REALIGNMENT			
	OVERALL	48.5	D	30.6	C
15	Grove Street & Lemon Grove Way (Unsignalized)				
	OVERALL	**35.4**	**E**	31.4	D
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)	ALL WAY STOP WITH REALIGNMENT			
	EB L EB R SB L	-	-	-	-
	OVERALL	**187.1**	**F**	**283.2**	**F**
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	**104.5**	**F**	**61.6**	**E**
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)				
	WB LR	**41.9**	**E**	20.8	C
	SB L	12.2	B	10.4	B
19	Lemon Grove Avenue & Central Avenue (Signalized)	26.4	C	44.6	D
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)				
	WB LR	**180.1**	**F**	**35.9**	**E**
	SB L	15.3	C	10.7	B
21	Kempf Street & Golden Avenue (Unsignalized)				
	EB LTR	**> 1000**	**F**	**> 1000**	**F**
	WB LTR	**155.9**	**F**	20.7	C
	NB L	8.4	A	10.0	B
	SB L	10.2	B	8.5	A
22	Kempf Street & Darryl Street (Unsignalized)				
	WB LR	16.9	C	11.0	B
	SB L	10.0	B	8.3	A
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)				
	OVERALL	**98.7**	**F**	**68.9**	**F**
24*	Washington Street & Golden Avenue (Unsignalized)				
	OVERALL	8.3	A	7.8	A
25	Buena Vista Avenue & Pacific Avenue (Unsignalized)				
	EB LTR	15.7	C	18.6	C
	WB LTR	13.0	B	12.0	B
	NB L	7.7	A	8.3	A
	SB L	0.0	A	7.9	A
26*	New Jersey Avenue & Central Avenue (Unsignalized)				
	OVERALL	12.9	B	11.5	B
27*	Buena Vista Avenue & Central Avenue (Unsignalized)				
	OVERALL	**86.3**	**F**	17.1	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM Peak; LOS F, PM Peak)
- Grove Street & Lemon Grove Way (LOS E, AM Peak)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (LOS F, AM/PM Peaks)
- Lemon Grove Avenue & North Avenue/Lemon Grove Way (LOS F, AM Peak; LOS E, PM Peak)
- Lemon Grove Avenue & Golden Avenue (LOS E, AM Peak)
- Lemon Grove Avenue & Lincoln Street (LOS F, AM Peak; LOS E, PM Peak)
- Kempf Street & Golden Avenue (EB LOS F, AM/PM Peak; WB LOS F, AM Peak)
- Skyline Drive/Kempf Street & Lincoln Street (LOS F, AM/PM Peaks)
- Buena Vista Avenue/Central Avenue (LOS F, AM Peak)

Roadway Segment Operations

Traffic operations for year 2035 with the implementation of the proposed LGDSP were analyzed for same thirty (30) roadway segments within the project boundary and seven (7) roadway segments outside the project boundary. **Table 8** shows that all study area roadway segments operate at Level of Service (LOS) D or better with the exception the following segments:

- North Avenue, between Buena Vista Avenue and Olive Street (LOS F)
- Buena Vista Avenue, north of North Avenue
- Buena Vista Avenue, between Lemon Avenue and Broadway
- Central Avenue, between Cypress Avenue and Olive Street

BROADWAY ROAD DIET

A road diet project can improve a community's walkability, livability, and economics. Several studies have found that road diets significantly reduce travel speeds, number and severity of collisions, improve the pedestrian environment and walkability, and increase property values adjacent to road diets. After a road diet conversion, there is improvement in comfort level and safety for all modes of transportation.

According to the *Road Diet Handbook: Setting Trends for Livable Street, 2nd Edition*, the ideal road diet location typically has four travel lanes and carries 12,000 to 18,000 ADTs (potentially up to 25,000 ADT). Additionally, good road diet project candidates include transit corridors, popular bike/pedestrian routes, commercial reinvestment areas/enterprise zones, historic streets, scenic routes, entertainment districts, and main streets. It should also be mentioned that the regional roadway network, including the presence of parallel routes, needs to be considered when identifying and evaluating a potential road diet project.

Based on the guidance outlined in the *Road Diet Handbook: Setting Trends for Livable Street, 2nd Edition*, Broadway between Lemon Grove Avenue and Washington Street, appears to be an ideal candidate for a road diet. This is based on year 2035 with Downtown Specific Plan daily traffic volumes (ADTs) ranging between 17,600 and 20,000 on this segment.

RICK ENGINEERING COMPANY
Traffic Division

TABLE 8
2035 WITH SPECIFIC PLAN ROADWAY SEGMENT OPERATIONS
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

	Street Segment	Roadway Classification	LOS D Capacity	2035	
				SPECIFIC PLAN	LOS
	Massachusetts Avenue				
1	b/w SR-94 WB and SR-94 EB Ramps	4-Lane Major	33,400	31,900	D
2	b/w SR-94 EB Ramps and Broadway	4-Lane Major	33,400	30,900	D
3*	b/w Pacific Ave and Westview Pl	4-Lane Major	33,400	22,800	B
	Broadway				
4*	West of Massachusetts Ave	4-Lane Major	33,400	33,200	D
5	b/w Citrus St and Alford St	4-Lane Major	33,400	31,700	D
6	b/w West St and New Jersey Ave	4-Lane Major	33,400	26,700	C
7	b/w Buena Vista Ave and Olive St	4-Lane Major	33,400	15,200	B
8	b/w Lemon Grove Ave and Grove St	4-Lane Major	33,400	17,600	B
9	b/w Kempf St and Columbus Pl	4-Lane Major	33,400	20,000	B
10*	b/w Columbus Pl and Lemon Grove Way	4-Lane Major	33,400	19,500	B
	Lemon Grove Avenue				
11	b/w Broadway and Lester Ave	4-Lane Major	33,400	25,100	C
12	b/w North Ave and SR-94 EB Ramps	4-Lane Major	33,400	54,200	-
	REALIGNMENT IMPROVEMENTS	6-Lane Prime	55,000	54,200	D
13	b/w North Ave and Grove St	4-Lane Major	33,400	7,000	A
	North Avenue				
14	b/w Lemon Grove Ave and Grove St	Residential/Local Collector	6,500	2,400	A
15	b/w Olive St and Citronica Driveway	Residential/Local Collector	6,500	17,400	-
	REALIGNMENT IMPROVEMENTS	5-Lane Class I Collector	24,800	17,400	C
16	b/w Buena Vista Ave and Olive St	Residential/Local Collector	6,500	**13,100**	**F**
17	b/w West St and Buena Vista Ave	Residential/Local Collector	6,500	4,900	C
	Buena Vista Avenue				
18	North of North Ave	Class III Collector	9,000	**15,900**	**F**
19	b/w North Ave and Broadway	Class III Collector	9,000	**14,500**	**F**
	Olive Street				
20	b/w Lemon Ave and Broadway	Residential/Local Collector	6,500	17,700	-
	REALIGNMENT IMPROVEMENTS	Class II Collector	2,000	17,700	D
	Lemon Grove Way				
21	East of Grove Ct	Class III Collector	9,000	2,900	A
	Grove Street				
22	North of Lemon Grove Way	Class II Collector	20,000	8,600	B
23	b/w North Ave and Lester Ave	Class II Collector	20,000	11,400	B
	Kempf Street				
24	b/w Broadway and Golden Ave	Class II Collector	20,000	19,700	D
25	b/w Roy St and Adams St	Class II Collector	20,000	14,100	C
	Skyline Drive				
26*	South of Lincoln St	Class II Collector	20,000	13,100	C
	Washington Street				
27*	b/w Golden Ave and Roy St	Class III Collector	9,000	1,500	A
	Lemon Grove Avenue				
28	b/w Central Ave and Golden Ave	4-Lane Major	33,400	23,200	B
29*	South of Lincoln St	4-Lane Major	33,400	24,700	B
	Buena Vista Avenue				
30*	b/w Church St and Central St	Class III Collector	9,000	7,100	C
	Vista Avenue				
31	b/w Broadway and North Ave	Residential/Local Collector	6,500	900	A
	North Avenue				
32	b/w Citrus St and Alford St	Residential/Local Collector	6,500	1,100	A
	Pacific Avenue				
33	b/w Citrus St and Alford St	Residential/Local Collector	6,500	600	A
34	b/w West St and New Jersey Ave	Residential/Local Collector	6,500	700	A
35	b/w New Jersey Ave and Buena Vista Ave	Residential/Local Collector	6,500	1,100	A
	Central Avenue				
36*	b/w Citrus St and New Jersey Ave	Class III Collector	9,000	7,800	D
37*	b/w Cypress Ave and Olive St	Class III Collector	9,000	**10,300**	**F**

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

Note:
4-Lane Major LOS D Capacity - 33,400
Class II Collector LOS D Capacity - 20,000
Class III Collector LOS D Capacity - 9,000
Residential/Local Collector LOS D Capactiy - 6,500
Roadway Segments classified per City of Lemon Grove Downtown Village Specific Plan, Amended April 2012.

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Therefore, Broadway, between Lemon Grove Avenue and Washington Street, is recommended for a road diet. The roadway should consist of raised median, one vehicle travel lane and bike lane in both directions, and diagonal parking on both sides of the road. The remaining roadway width should be utilized for sidewalk and a flex zone, which includes landscaping, street lighting, bus shelters, street furniture, wayfinding signs, bike racks, etc. **Appendix M** shows the proposed cross sections of the road diet on Broadway.

CONCLUSIONS/RECOMMENDATIONS

Based on the *SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region* significance impact criteria, the proposed Lemon Grove Downtown Specific Plan is calculated to have significant impacts at the following intersections for year 2035 conditions with Downtown Specific Plan:

- Massachusetts Avenue & Lemon Grove Plaza Shopping Center/SR-94 Eastbound Ramps (LOS E, AM Peak; LOS F, PM Peak)
- Grove Street & Lemon Grove Way (LOS E, AM Peak)
- Lemon Grove Avenue & SR-94 Eastbound Ramps (LOS F, AM/PM Peaks)
- Lemon Grove Avenue & North Avenue/Lemon Grove Way (LOS F, AM Peak; LOS E, PM Peak)
- Lemon Grove Avenue & Golden Avenue (LOS E, AM Peak)
- Lemon Grove Avenue & Lincoln Street (LOS F, AM Peak; LOS E, PM Peak)
- Kempf Street & Golden Avenue (EB LOS F, AM/PM Peak; WB LOS F, AM Peak)
- Skyline Drive/Kempf Street & Lincoln Street (LOS F, AM/PM Peaks)
- Buena Vista Avenue/Central Avenue (LOS F, AM Peak)

Table 9 shows a summary of the intersection operations for all of the scenarios analyzed.

The following are recommendations to reduce delays to LOS D or better:

MASSACHUSETTS AVENUE & LEMON GROVE PLAZA SHOPPING CENTER/SR-94 EASTBOUND RAMPS

Average delay at traffic signal can be reduced with the following improvements:

- Restripe the northbound approach to a left turn lane, through lane, and trap right turn lane
- Restripe the westbound approach to a left turn lane, through lane, and a right turn lane with a Right-turn-overlap phase

It should be noted that while these improvements would decrease the average delay to below what is calculated year 2035 without the Downtown Specific Plan, it is still anticipated to operate at a LOS E during the AM/PM peaks.

RICK ENGINEERING COMPANY
Traffic Division

TABLE 9
INTERSECTION OPERATIONS SUMMARY
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

No.	Intersection	Existing				2035				2035 Specific Plan			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	**77.5**	**E**	**80.1**	**F**	**62.3**	**E**	**78.9**	**E**	**70.7**	**E**	**94.7**	**F**
2	Massachusetts Avenue & Broadway (Signalized)	52.5	D	**60.1**	**E**	42.4	D	49.4	D	50.9	D	50.4	D
3*	Massachusetts Avenue & Central Avenue (Signalized)	23.3	C	29.0	C	21.3	C	29.8	C	30.5	C	23.2	C
4	Broadway & West Avenue (Signalized)	11.3	B	12.7	B	10.4	B	11.8	B	10.1	B	13.1	B
5	New Jersey Avenue/Home Depot Driveway & Broadway (Signalized)	15.4	B	10.9	B	14.9	B	10.0	A	16.0	B	12.8	B
6	Buena Vista Avenue & Broadway (Signalized)	22.7	C	22.1	C	20.4	C	20.9	C	23.8	C	30.2	C
7	Olive Street & Broadway (Unsignalized)					SIGNALIZED WITH REALIGNMENT				SIGNALIZED WITH REALIGNMENT			
	EB L	8.4	A	8.5	A								
	WB L	8.5	A	9.7	A	26.1	C	26.1	C	32.4	C	44.4	D
	NB LTR	16.3	C	**45.5**	**E**								
	SB LTR	**37.4**	**E**	**> 50**	**F**								
8	Lemon Grove Avenue & Broadway (Signalized)	**66.0**	**E**	42.1	D	34.9	C	34.7	C	44.4	D	39.7	D
10	Broadway & Grove Street (Signalized)	10.1	B	13.9	B	9.9	A	13.5	B	9.9	A	12.5	B
11	Kempf Street/Driveway & Broadway (Signalized)	23.7	C	16.1	B	24.1	C	23.4	C	16.9	B	13.7	B
12	Washington Street/Columbus Place & Broadway (Signalized)	25.8	C	15.6	B	13.8	B	7.9	A	15.3	B	20.2	C
13	Buena Vista Avenue & North Avenue (Signalized)	15.4	B	16.0	B	15.9	B	18.2	B	33.0	C	23.5	C
14	Olive Street & North Avenue (Unsignalized)					SIGNALIZED WITH REALIGNMENT				SIGNALIZED WITH REALIGNMENT			
	OVERALL	10.5	B	11.7	B	22.1	C	26.7	C	48.5	D	30.6	C
15	Grove Street & Lemon Grove Way (Unsignalized)												
	OVERALL	14.6	B	11.4	B	14.8	B	11.7	B	**35.4**	**E**	31.4	D
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)					ALL WAY STOP WITH REALIGNMENT				ALL WAY STOP WITH REALIGNMENT			
	EB L	**49.2**	**E**	**>50**	**F**								
	EB R	33.2	D	**>50**	**F**	-	-	-	-	-	-	-	-
	SB L	10.4	B	11.9	B								
	OVERALL	-	-	-	-	**65.9**	**F**	**165.8**	**F**	**187.1**	**F**	**283.2**	**F**
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	28.0	C	24.6	C	**84.9**	**F**	48.0	D	**104.5**	**F**	**61.6**	**E**
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)												
	WB LR	25.3	D	16.9	C	19.1	C	20.6	C	**41.9**	**E**	20.8	C
	SB L	10.8	B	9.5	A	10.7	B	9.7	A	12.2	B	10.4	B
19	Lemon Grove Avenue & Central Avenue (Signalized)	24.5	C	29.1	C	22.2	C	28.7	C	26.4	C	44.6	D
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)												
	WB LR	27.4	D	22.7	C	24.3	C	23.6	C	**180.1**	**F**	**35.9**	**E**
	SB L	11.7	B	9.8	A	11.3	B	9.9	A	15.3	C	10.7	B
21	Kempf Street & Golden Avenue (Unsignalized)												
	EB LTR	**> 50**	**F**	**> 50**	**F**	31.9	D	**52.0**	**F**	**> 1000**	**F**	**> 1000**	**F**
	WB LTR	22.9	C	17.7	C	16.8	C	13.2	B	**155.9**	**F**	20.7	C
	NB L	7.9	A	8.5	A	7.8	A	8.6	A	8.4	A	10.0	B
	SB L	8.8	A	8.0	A	8.8	A	8.0	A	10.2	B	8.5	A
22	Kempf Street & Darryl Street (Unsignalized)												
	WB LR	12.9	B	10.9	B	12.3	B	9.9	A	16.9	C	11.0	B
	SB L	8.7	A	7.8	A	8.7	A	7.9	A	10.0	B	8.3	A
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)												
	OVERALL	30.8	D	17.8	C	22.1	C	19.0	C	**98.7**	**F**	**68.9**	**F**
24*	Washington Street & Golden Avenue (Unsignalized)												
	OVERALL	7.9	A	7.7	A	7.8	A	7.5	A	8.3	A	7.8	A
25	Buena Vista Avenue & Pacific Avenue (Unsignalized)												
	EB LTR	14.6	B	17.5	C	14.2	B	16.9	C	15.7	C	18.6	C
	WB LTR	12.8	B	13.6	B	12.5	B	12.6	B	13.0	B	12.0	B
	NB L	7.7	A	8.1	A	7.7	A	8.2	A	7.7	A	8.3	A
	SB L	8.2	A	7.8	A	0.0	A	7.8	A	0.0	A	7.9	A
26*	New Jersey Avenue & Central Avenue (Unsignalized)												
	OVERALL	9.6	A	12.8	B	9.7	A	12.0	B	12.9	B	11.5	B
27*	Buena Vista Avenue & Central Avenue (Unsignalized)												
	OVERALL	23.5	C	16.0	C	16.3	C	16.7	C	**86.3**	**F**	17.1	C

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

GROVE STREET & LEMON GROVE WAY

Impact can be mitigated with the following improvements:

- Signalization of the intersection

It should be noted that this impact could also be mitigated with the implementation of a single-lane roundabout. It is anticipated that this location could be an ideal fit based on the right-of-way boundaries.

LEMON GROVE AVENUE & SR-94 EASTBOUND RAMPS

Impact can be mitigated with the following improvement:

- Signalization of the intersection

This signal should be coordinated with the signalized intersection to the south (Lemon Grove Avenue/North Avenue/Lemon Grove Way).

LEMON GROVE AVENUE & NORTH AVENUE/LEMON GROVE WAY

Impact can be mitigated with the following improvement:

- Right-turn overlap for the southbound right turn movement

LEMON GROVE AVENUE & GOLDEN AVENUE

Impact can be mitigated with the following restriction:

- Restrict westbound left turn movements during the AM and PM peak hours

This can be achieved via physical barriers (raised medians/pork-chop islands) and/or signage.

LEMON GROVE AVENUE & LINCOLN STREET

Impact can be mitigated with the following improvement:

- Construct a raised median to restrict westbound left turn movements.

It should be noted a left turn can be made onto Lemon Grove Avenue by driving up School Lane and taking a left at Central Avenue. U-turns can also be made at the intersection of Lemon Grove Avenue/Central Avenue.

KEMPF STREET & GOLDEN AVENUE

Impact can be mitigated with the following improvement:

- Signalization of the intersection

It should be noted a this signal would require coordination with the traffic signal at the intersection of Broadway/Kempf Street.

SKYLINE DRIVE/KEMPF STREET & LINCOLN STREET

Impact can be mitigated with the following improvement:

- Signalization of the intersection

BUENA VISTA AVENUE & CENTRAL AVENUE

Impact can be mitigated with the following improvement:

- Signalization of the intersection

Based on the *SANTEC/ITE Guidelines for Traffic Impact Studies (TIS) in the San Diego Region* significance impact criteria, the proposed Lemon Grove Downtown Specific Plan is calculated to have significant impacts at the following roadway segments for year 2035 conditions with Downtown Specific Plan:

- North Avenue, between Buena Vista Avenue & Olive Street (LOS F)
- Buena Vista Avenue, north of North Avenue (LOS F)
- Buena Vista Avenue, between Lemon Avenue & Broadway (LOS F)
- Central Avenue, between Cypress Avenue & Olive Street (LOS F)

Table 10 shows a summary of the roadway segment operations for all of the scenarios analyzed.

The following are recommendations to reduce delays to LOS D or better:

NORTH AVENUE, B/W BUENA VISTA AVENUE & OLIVE STREET

Widen roadway as necessary to provide a Class II Collector roadway.

BUENA VISTA AVENUE, NORTH OF NORTH AVENUE

Widen roadway as necessary to provide a Class II Collector roadway.

BUENA VISTA AVENUE, B/W NORTH AVENUE & BROADWAY

Widen roadway as necessary to provide a Class II Collector roadway.

RICK ENGINEERING COMPANY
Traffic Division

TABLE 10
ROADWAY SEGMENT OPERATIONS SUMMARY
LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN

	Street Segment	Roadway Classification	LOS D Capacity	Existing		2035			
				ADT	LOS	NO BUILD	LOS	SPECIFIC PLAN	LOS
	Massachusetts Avenue								
1	b/w SR-94 WB and SR-94 EB Ramps	4-Lane Major	33,400	26,348	C	28,200	C	31,900	D
2	b/w SR-94 EB Ramps and Broadway	4-Lane Major	33,400	26,163	C	28,000	C	30,900	D
3*	b/w Pacific Ave and Westview Pl	4-Lane Major	33,400	19,794	B	21,100	B	22,800	B
	Broadway								
4*	West of Massachusetts Ave	4-Lane Major	33,400	26,232	C	28,000	C	33,200	D
5	b/w Citrus St and Alford St	4-Lane Major	33,400	19,367	B	22,100	B	31,700	D
6	b/w West St and New Jersey Ave	4-Lane Major	33,400	18,492	B	21,100	B	26,700	C
7	b/w Buena Vista Ave and Olive St	4-Lane Major	33,400	16,284	B	11,800	A	15,200	B
8	b/w Lemon Grove Ave and Grove St	4-Lane Major	33,400	12,290	A	14,000	A	17,600	B
9	b/w Kempf St and Columbus Pl	4-Lane Major	33,400	12,723	A	13,400	A	20,000	B
10*	b/w Columbus Pl and Lemon Grove Way	4-Lane Major	33,400	11,809	A	12,400	A	19,500	B
	Lemon Grove Avenue								
11	b/w Broadway and Lester Ave	4-Lane Major	33,400	19,717	B	18,200	B	25,100	C
12	b/w North Ave and SR-94 EB Ramps	4-Lane Major	33,400	**35,221**	**E**	40,200	-	54,200	-
	REALIGNMENT IMPROVEMENTS	6-Lane Prime	55,000	-	-	40,200	B	54,200	D
13	b/w North Ave and Grove St	4-Lane Major	33,400	5,904	A	6,700	A	7,000	A
	North Avenue								
14	b/w Lemon Grove Ave and Grove St	Residential/Local Collector	6,500	1,412	A	1,600	A	2,400	A
15	b/w Olive St and Citronica Driveway	Residential/Local Collector	6,500	5,878	D	9,400	-	17,400	-
	REALIGNMENT IMPROVEMENTS	5-Lane Class I Collector	24,800	-	-	9,400	A	17,400	C
16	b/w Buena Vista Ave and Olive St	Residential/Local Collector	6,500	4,434	C	**12,900**	**F**	**13,100**	**F**
17	b/w West St and Buena Vista Ave	Residential/Local Collector	6,500	2,961	A	3,400	A	4,900	C
	Buena Vista Avenue								
18	North of North Ave	Class III Collector	9,000	8,352	D	**9,500**	**E**	**15,900**	**F**
19	b/w North Ave and Broadway	Class III Collector	9,000	8,255	D	**9,400**	**E**	**14,500**	**F**
	Olive Street								
20	b/w Lemon Ave and Broadway	Residential/Local Collector	6,500	2,665	A	9,700	-	17,700	-
	REALIGNMENT IMPROVEMENTS	Class II Collector	2,000	-	-	9,700	A	17,700	D
	Lemon Grove Way								
21	East of Grove Ct	Class III Collector	9,000	3,987	A	4,200	A	2,900	A
	Grove Street								
22	North of Lemon Grove Way	Class II Collector	20,000	2,644	A	3,000	A	8,600	B
23	b/w North Ave and Lester Ave	Class II Collector	20,000	5,154	A	5,900	A	11,400	B
	Kempf Street								
24	b/w Broadway and Golden Ave	Class II Collector	20,000	11,417	B	12,000	C	19,700	D
25	b/w Roy St and Adams St	Class II Collector	20,000	8,477	B	8,900	B	14,100	C
	Skyline Drive								
26*	South of Lincoln St	Class II Collector	20,000	9,674	B	10,200	B	13,100	C
	Washington Street								
27*	b/w Golden Ave and Roy St	Class III Collector	9,000	1,377	A	1,400	A	1,500	A
	Lemon Grove Avenue								
28	b/w Central Ave and Golden Ave	4-Lane Major	33,400	17,981	B	18,200	B	23,200	B
29*	South of Lincoln St	4-Lane Major	33,400	18,194	B	20,800	B	24,700	B
	Buena Vista Avenue								
30*	b/w Church St and Central St	Class III Collector	9,000	5,163	C	5,900	C	7,100	C
	Vista Avenue								
31	b/w Broadway and North Ave	Residential/Local Collector	6,500	808	A	900	A	900	A
	North Avenue								
32	b/w Citrus St and Alford St	Residential/Local Collector	6,500	965	A	1,100	A	1,100	A
	Pacific Avenue								
33	b/w Citrus St and Alford St	Residential/Local Collector	6,500	549	A	600	A	600	A
34	b/w West St and New Jersey Ave	Residential/Local Collector	6,500	615	A	700	A	700	A
35	b/w New Jersey Ave and Buena Vista Ave	Residential/Local Collector	6,500	951	A	1,100	A	1,100	A
	Central Avenue								
36*	b/w Citrus St and New Jersey Ave	Class III Collector	9,000	3,974	A	4,500	A	7,800	D
37*	b/w Cypress Ave and Olive St	Class III Collector	9,000	6,061	C	6,900	C	**10,300**	**F**

* Located outside boundary of Lemon Grove Downtown Village Specific Plan

Note:
4-Lane Major LOS D Capacity - 33,400
Class II Collector LOS D Capacity - 20,000
Class III Collector LOS D Capacity - 9,000
Residential/Local Collector LOS D Capactiy - 6,500
Roadway Segments classified per City of Lemon Grove Downtown Village Specific Plan, Amended April 2012.

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CENTRAL AVENUE, B/W CYPRESS STREET & OLIVE STREET

Provide a Class II collector roadway.

Widening the roadway to a Class II collector roadway is not feasible due to the existing properties fronting the segment. However, this roadway segment is anticipated to operate acceptably during the AM/PM peak periods with the proposed signalization of Buena Vista Avenue and Central Avenue.

Table 11 summarizes the impacts at the intersections and roadways due to the proposed Lemon Grove Downtown Specific Plan and the proposed mitigation measures.

RICK ENGINEERING COMPANY
Traffic Division

TABLE 11
IMPACTS AND MITIGATION MEASURES SUMMARY
LEMON GROVE DOWNTOWN SPECIFIC PLAN

No.	Impacted Intersection	Proposed Mitigation	Mitigation LOS	
			AM	PM
1	Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps (Signalized)	Restripe the northbound approach to a left turn lane, through lane, and trap right turn lane and the westbound approach to a left turn lane, through lane, and a right turn lane with a right-turn-overlap phase. These improvements would decrease the average delay but the intersection is still anticipated to operate at LOS E during the AM/PM peaks.	E (61.8)	E (68.7)
15	Grove Street & Lemon Grove Way (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer. Impact can also be mitigated with the implementation of a single-lane roundabout.	A (9.3)	A (7.0)
16	Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer. Signal should be coordinated with the intersection to the south (Lemon Grove Avenue/North Avenue/Lemon Grove Way).	C (20.3)	D (53.9)
17	Lemon Grove Avenue & North Avenue & Lemon Grove Way (Signalized)	Provide right-turn overlap signal phasing for southbound right turn movement.	C (32.3)	C (28.4)
18	Lemon Grove Avenue & Golden Avenue (Unsignalized)	Restrict the westbound left turn movements during the AM/PM peak hours.	C (20.9)	B (14.2)
20	Lemon Grove Avenue & Lincoln Street (Unsignalized)	Construct a raised median to restrict westbound left turn movements.	D (27.0)	B (13.0)
21	Kempf Street & Golden Avenue (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	B (17.0)	B (13.6)
23	Skyline Drive/Kempf Street & Lincoln Street (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	A (7.9)	A (9.4)
27	Buena Vista Avenue & Central Avenue (Unsignalized)	Signalize intersection to the satisfaction of the City Engineer.	A (9.6)	A (7.5)

No.	Impacted Roadway Segment	Proposed Mitigation	Mitigation LOS
16	North Avenue, b/w Buena Vista Avenue & Olive Street	Widen roadway as necessary to provide a Class II Collector roadway.	C
18	Buena Vista Avenue, north of North Avenue	Widen roadway as necessary to provide a Class II Collector roadway.	C
19	Buena Vista Avenue, b/w North Avenue & Broadway	Widen roadway as necessary to provide a Class II Collector roadway.	C
37	Central Avenue, bw Cypress Street & Olive Street	Widening roadway to a Class II Collector roadway is not feasible due to the existing properties fronting the segment. However, this roadway segment is anticipated to operate acceptably during the AM/PM peak periods with the proposed signalization of Buena Vista Avenue & Central Avenue.	D

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APPENDIX A

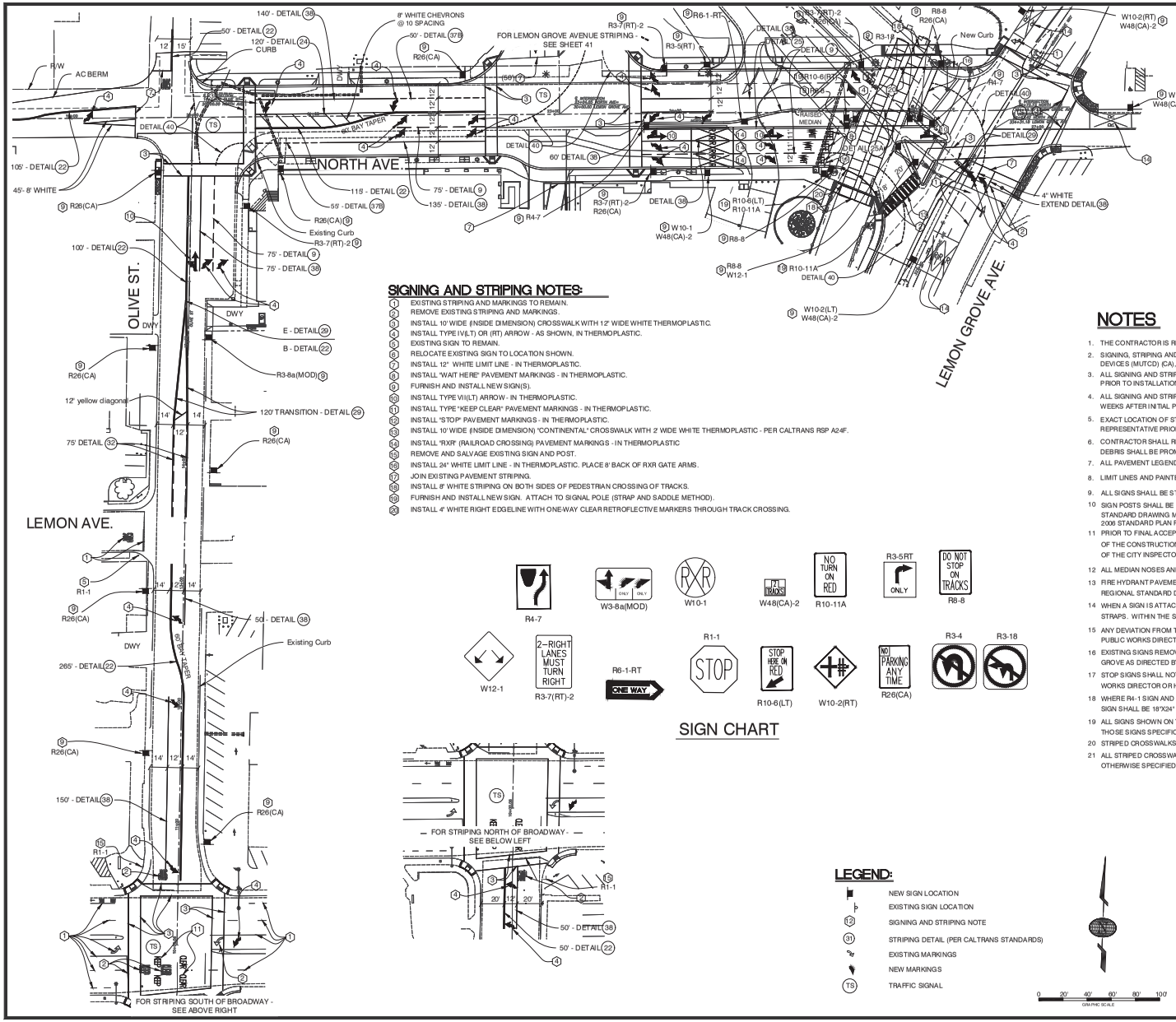
LEMON GROVE REALIGNMENT PROJECT

Date of Exhibit: 08.31.2016
USGS/SANGIS Aerial Imagery: 11.2014

Scale in Feet
0 40 80 120 160
North

Lemon Grove Avenue Realignment

J-17554



SIGNING AND STRIPING NOTES:

1. EXISTING STRIPING AND MARKINGS TO REMAIN.
2. REMOVE EXISTING STRIPING AND MARKINGS.
3. INSTALL 10' WIDE (INSIDE DIMENSION) CROSSWALK WITH 12' WIDE WHITE THERMOPLASTIC.
4. INSTALL TYPE I(WL,T) OR (RT) ARROW - AS SHOWN, IN THERMOPLASTIC.
5. EXISTING SIGN TO REMAIN.
6. RELOCATE EXISTING SIGN TO LOCATION SHOWN.
7. INSTALL 12" WHITE LIMIT LINE - IN THERMOPLASTIC.
8. INSTALL "WAIT HERE" PAVEMENT MARKINGS - IN THERMOPLASTIC.
9. FURNISH AND INSTALL NEW SIGN(S).
10. INSTALL TYPE VII(LT) ARROW - IN THERMOPLASTIC.
11. INSTALL TYPE "KEEP CLEAR" PAVEMENT MARKINGS - IN THERMOPLASTIC.
12. INSTALL "STOP" PAVEMENT MARKINGS - IN THERMOPLASTIC.
13. INSTALL 10' WIDE (INSIDE DIMENSION) "CONTINENTAL" CROSSWALK WITH 2' WIDE WHITE THERMOPLASTIC - PER CALTRANS RSP A24F.
14. INSTALL "RXR" (RAILROAD CROSSING) PAVEMENT MARKINGS - IN THERMOPLASTIC
15. REMOVE AND SALVAGE EXISTING SIGN AND POST.
16. INSTALL 24" WHITE LIMIT LINE - IN THERMOPLASTIC. PLACE 8' BACK OF RXR GATE ARMS.
17. JOIN EXISTING PAVEMENT STRIPING.
18. INSTALL 8' WHITE STRIPING ON BOTH SIDES OF PEDESTRIAN CROSSING OF TRACKS.
19. FURNISH AND INSTALL NEW SIGN. ATTACH TO SIGNAL POLE (STRAP AND SADDLE METHOD).
20. INSTALL 4" WHITE RIGHT EDGELINE WITH ONE-WAY CLEAR RETROFLECTIVE MARKERS THROUGH TRACK CROSSING.

SIGN CHART

NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SIGNING AND STRIPING.
2. SIGNING, STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (CA), STANDARD SPECIFICATIONS (LATEST VERSION THEREOF), THESE PLANS AND THE SPECIAL PROVISIONS.
3. ALL SIGNING AND STRIPING IS SUBJECT TO THE APPROVAL OF THE PUBLIC WORKS DIRECTOR OR HIS REPRESENTATIVE, PRIOR TO INSTALLATION. WITHIN THE STATE RIGHT OF WAY, SIGNING AND STRIPING IS SUBJECT TO APPROVAL OF THE STATE REPRESENTATIVE.
4. ALL SIGNING AND STRIPING SHALL BE REFLECTIVE PER CALTRANS SPECIFICATIONS. STRIPING SHALL BE REPAINTED TWO WEEKS AFTER INITIAL PAINTING. SIGNING SHALL USE 3M HIGH INTENSITY SHEETING OR EQUAL.
5. EXACT LOCATION OF STRIPING AND STOP LIMIT LINES SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR OR HIS REPRESENTATIVE PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL REMOVE ALL CONFLICTING PAINTED LINES, MARKINGS AND PAVEMENT LEGENDS BY GRINDING. DEBRIS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
7. ALL PAVEMENT LEGENDS SHALL BE THE LATEST VERSION OF THE CALTRANS STENCILS.
8. LIMIT LINES AND PAINTED CROSSWALKS SHALL BE FIELD LOCATED.
9. ALL SIGNS SHALL BE STANDARD SIZE AS SHOWN IN THE MUTCD(CA) UNLESS OTHERWISE SPECIFIED.
10. SIGN POSTS SHALL BE SQUARE PERFORATED STEEL TUBING WITH BREAKAWAY BASE PER SAN DIEGO REGIONAL STANDARD DRAWING M-45. WITHIN THE STATE RIGHT OF WAY, ALL SIGN POSTS SHALL BE WOOD POSTS. REFER TO 2006 STANDARD PLAN RS2, PAGE 307.
11. PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL STREET STRIPING AND MARKINGS WITHIN THE PERIMETER OF THE CONSTRUCTION PROJECT WILL BE RESTORED TO A "LIKE NEW" CONDITION, IN A MANNER MEETING THE APPROVAL OF THE CITY INSPECTOR.
12. ALL MEDIAN NOSES AND FLARES SHALL BE PAINTED YELLOW.
13. FIRE HYDRANT PAVEMENT MARKERS SHALL CONFORM TO THE LATEST SAN DIEGO REGIONAL STANDARD DRAWING M-19.
14. WHEN A SIGN IS ATTACHED TO A POLE, IT SHALL BE MOUNTED USING A STANDARD CITY MOUNTING BRACKET WITH STRAPS. WITHIN THE STATE RIGHT OF WAY, IT SHALL BE PER THE 2006 CALTRANS STANDARD PLAN RS2, PAGE 307.
15. ANY DEVIATION FROM THESE SIGNING AND STRIPING PLANS SHALL BE APPROVED BY THE ENGINEER OF WORK AND PUBLIC WORKS DIRECTOR(STATE REPRESENTATIVE WITHIN THE STATE RIGHT OF WAY) PRIOR TO ANY CHANGE IN THE FIELD.
16. EXISTING SIGNS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY OF LEMON GROVE AS DIRECTED BY THE CITY INSPECTOR.
17. STOP SIGNS SHALL NOT BE REMOVED UNTIL TRAFFIC SIGNALS ARE OPERATIONAL OR UNTIL DIRECTED BY THE PUBLIC WORKS DIRECTOR OR HIS REPRESENTATIVE.
18. WHERE R4-1 SIGN AND TYPE N-1 OBJECT MARKER ARE TO BE INSTALLED IN A 2-FOOT WIDE MEDIAN NOSE, THE R7 SIGN SHALL BE 18"X24" AND THE N-1 OBJECT MARKER SHALL BE 12"X12".
19. ALL SIGNS SHOWN ON THESE PLANS SHALL BE NEW SIGNS PROVIDED AND INSTALLED BY THE CONTRACTOR EXCEPT THOSE SIGNS SPECIFICALLY SHOWN AS EXISTING TO BE RELOCATED OR TO REMAIN.
20. STRIPED CROSSWALKS SHALL HAVE 10' INSIDE DIMENSION UNLESS OTHERWISE SPECIFIED.
21. ALL STRIPED CROSSWALKS, PAVEMENT ARROWS AND PAVEMENT LEGENDS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.

LEGEND:

- NEW SIGN LOCATION
- EXISTING SIGN LOCATION
- (12) SIGNING AND STRIPING NOTE
- (31) STRIPING DETAIL (PER CALTRANS STANDARDS)
- EXISTING MARKINGS
- NEW MARKINGS
- (TS) TRAFFIC SIGNAL

0 20' 40' 60' 80' 100'
GRAPHIC SCALE

REGISTERED PROFESSIONAL ENGINEER — RICHARD H. CRAFTS — No. 34512 Exp. 9-30-17 — CIVIL — STATE OF CALIFORNIA

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :

UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133

SIGNING AND STRIPING PLANS FOR: LEMON GROVE AVENUE REALIGNMENT

SIGNING AND STRIPING PLANS

CITY OF LEMON GROVE, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 40 OF 64 SHEETS

FOR CITY ENGINEER — DATE 4/26/16

CONTRACT NO.

Mike James
DEPARTMENT HEAD

DESCRIPTION	DRAWN BY	APPROVED	DATE	FILMED
AS-BUILT				

PHIL KERN
PROJECT MANAGER

Richard Crafts
DESIGN ENGINEER

NAD 83 COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

1680

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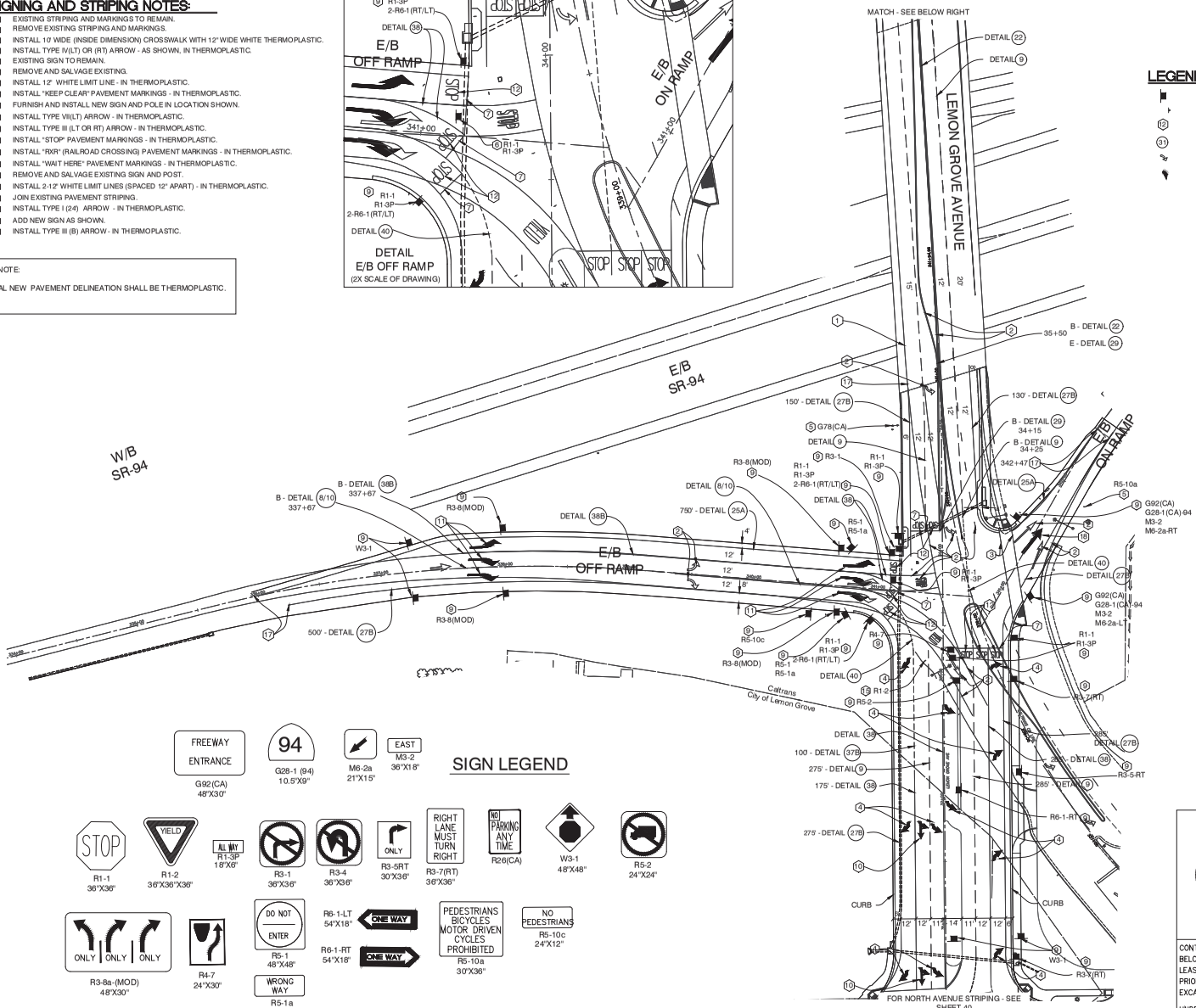
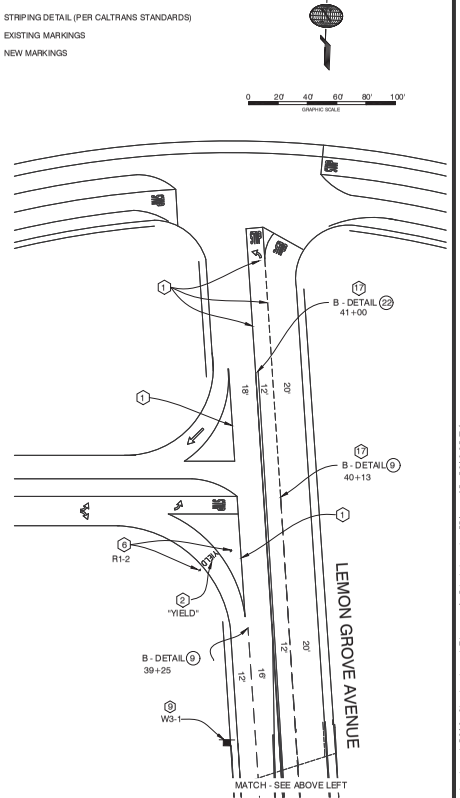
SIGNING AND STRIPING NOTES:

1. EXISTING STRIPING AND MARKINGS TO REMAIN.
2. REMOVE EXISTING STRIPING AND MARKINGS.
3. INSTALL 10' WIDE (INSIDE DIMENSION) CROSSWALK WITH 12" WIDE WHITE THERMOPLASTIC.
4. INSTALL TYPE IV(LT) OR (RT) ARROW - AS SHOWN, IN THERMOPLASTIC.
5. EXISTING SIGN TO REMAIN.
6. REMOVE AND SALVAGE EXISTING.
7. INSTALL 12" WHITE LIMIT LINE - IN THERMOPLASTIC.
8. INSTALL "KEEP CLEAR" PAVEMENT MARKINGS - IN THERMOPLASTIC.
9. FURNISH AND INSTALL NEW SIGN AND POLE IN LOCATION SHOWN.
10. INSTALL TYPE VII(LT) ARROW - IN THERMOPLASTIC.
11. INSTALL TYPE III (LT OR RT) ARROW - IN THERMOPLASTIC.
12. INSTALL "STOP" PAVEMENT MARKINGS - IN THERMOPLASTIC.
13. INSTALL "RXR" (RAILROAD CROSSING) PAVEMENT MARKINGS - IN THERMOPLASTIC.
14. INSTALL "WAIT HERE" PAVEMENT MARKINGS - IN THERMOPLASTIC.
15. REMOVE AND SALVAGE EXISTING SIGN AND POST.
16. INSTALL 2-12" WHITE LIMIT LINES (SPACED 12" APART) - IN THERMOPLASTIC.
17. JOIN EXISTING PAVEMENT STRIPING.
18. INSTALL TYPE I (24) ARROW - IN THERMOPLASTIC.
19. ADD NEW SIGN AS SHOWN.
20. INSTALL TYPE III (B) ARROW - IN THERMOPLASTIC.

NOTE:

AL NEW PAVEMENT DELINEATION SHALL BE THERMOPLASTIC.





LEGEND:

- NEW SIGN LOCATION
- EXISTING SIGN LOCATION
- (12) SIGNING AND STRIPING NOTE
- (31) STRIPING DETAIL (PER CALTRANS STANDARDS)
- EXISTING MARKINGS
- NEW MARKINGS

0 20' 40' 60' 80' 100'
GRAPHIC SCALE

SIGN LEGEND

PERMIT NUMBER	11-14-NMC-0769
CO SD	RTE 94 PM 8.98

AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

REGISTERED PROFESSIONAL ENGINEER RICHARD H. CRAFTS No. 34512 Exp. 9-30-17 CIVIL STATE OF CALIFORNIA

SIGNING AND STRIPING PLANS FOR: LEMON GROVE AVENUE REALIGNMENT

SIGNING AND STRIPING PLANS

CITY OF LEMON GROVE, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 41 OF 64 SHEETS

FOR CITY ENGINEER — DATE 4/26/16

CONTRACT NO.

Mike James
DEPARTMENT HEAD

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :

UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133

DESCRIPTION	DRAWN BY	APPROVED	DATE	FILMED
AS-BUILT				

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

PHIL KERN
PROJECT MANAGER

Richard Crafts
DESIGN ENGINEER

NAD 83 COORDINATES

1680

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APPENDIX B

TRAFFIC VOLUME COUNT SHEETS

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-94 Eastbound Ramps-Shoppi @ Massachusetts Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Ramps-Shopping Center Driveway @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	6	73	95	36	2	9	115	115	2	3	6	5	467
7:15 AM	8	64	78	51	1	9	111	110	1	2	9	3	447
7:30 AM	4	97	95	66	2	16	156	115	3	3	14	7	578
7:45 AM	13	125	74	55	8	13	94	136	4	2	7	3	534
8:00 AM	15	109	66	48	8	22	130	126	4	3	9	6	546
8:15 AM	22	127	88	42	2	16	126	153	6	6	8	9	605
8:30 AM	23	106	68	40	3	16	116	129	1	5	6	4	517
8:45 AM	14	85	69	51	3	21	129	115	10	9	8	6	520
Total	105	786	633	389	29	122	977	999	31	33	67	43	4,214

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	54	458	323	211	20	67	506	530	17	14	38	25	2,263
PHF	0.61	0.90	0.85	0.80	0.63	0.76	0.81	0.87	0.71	0.58	0.68	0.69	0.94
Movement PHF		0.88			0.89			0.92			0.80		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	32	157	88	77	6	24	130	137	8	12	37	21	729
4:15 PM	27	165	87	84	19	31	128	121	12	18	18	20	730
4:30 PM	26	168	73	78	14	19	138	127	4	22	19	22	710
4:45 PM	26	157	80	109	12	33	135	114	6	21	21	22	736
5:00 PM	23	166	79	91	10	36	128	144	8	15	26	28	754
5:15 PM	30	149	72	102	15	22	121	129	13	18	18	20	709
5:30 PM	29	100	100	86	12	33	131	120	12	15	29	20	687
5:45 PM	32	146	96	91	10	40	155	102	13	20	25	28	758
Total	225	1208	675	718	98	238	1,066	994	76	141	193	181	5,813

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	102	656	319	362	55	119	529	506	30	76	84	92	2930
PHF	0.94	0.976	0.917	0.83	0.724	0.826	0.958	0.878	0.625	0.864	0.808	0.821	0.97
Movement PHF		0.97			0.87			0.95			0.91		0.97

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-94 Eastbound Ramps-Shoppi @ Massachusetts Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Ramps-Shopping Center Driveway @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	1	0	0	0	0	3

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.38**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	1	0	0	0	1	0	0	0	0	3
PHF	#####	0.25	#####	0.25	#####	#####	#####	0.25	#####	#####	#####	#####	0.38
Movement PHF		0.25			0.25			0.25			#DIV/0!		0.38

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	1	2	0	0	0	0	3

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	2	0	0	0	0	2
PHF	#####	#####	#####	#####	#####	#####	#####	0.5	#####	#####	#####	#####	0.50
Movement PHF		#DIV/0!			#DIV/0!			0.50			#DIV/0!		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Massachusetts Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	19	54	19	36	76	6	8	144	57	14	47	61	541
7:15 AM	14	41	18	32	84	10	9	128	59	25	50	65	535
7:30 AM	18	63	24	43	102	6	11	161	47	29	55	84	643
7:45 AM	25	80	25	45	80	7	5	131	39	39	55	64	595
8:00 AM	21	76	37	39	60	10	10	156	54	26	69	63	621
8:15 AM	25	85	34	57	90	11	8	151	70	31	79	72	713
8:30 AM	27	59	32	47	69	15	10	136	44	38	83	54	614
8:45 AM	19	82	52	52	74	8	15	177	46	19	98	121	763
Total	168	540	241	351	635	73	76	1,184	416	221	536	584	5,025

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	92	302	155	195	293	44	43	620	214	114	329	310	2,711
PHF	0.85	0.89	0.75	0.86	0.81	0.73	0.72	0.88	0.76	0.75	0.84	0.64	0.89
Movement PHF		0.90			0.84			0.92			0.79		0.89

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	23	119	65	38	88	27	12	100	48	59	146	135	860
4:15 PM	28	103	78	45	80	26	9	101	35	66	139	118	828
4:30 PM	19	111	77	45	103	24	12	126	40	62	142	127	888
4:45 PM	17	106	69	58	94	19	12	113	47	74	202	162	973
5:00 PM	18	122	66	40	87	17	7	110	38	76	150	153	884
5:15 PM	26	113	88	46	95	16	15	111	58	61	150	133	912
5:30 PM	17	114	45	46	88	27	17	115	42	76	152	129	868
5:45 PM	15	88	75	47	75	19	13	104	38	74	130	158	836
Total	163	876	563	365	710	175	97	880	346	548	1,211	1,115	7,049

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	80	452	300	189	379	76	46	460	183	273	644	575	3657
PHF	0.77	0.926	0.852	0.815	0.92	0.792	0.767	0.913	0.789	0.898	0.797	0.887	0.94
Movement PHF		0.92			0.94			0.94			0.85		0.94

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Massachusetts Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	2	3
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:30 AM	1	0	0	1	0	2	1	0	0	1	0	1	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	0	0	3	0	4	1	0	0	1	0	7	17

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.39**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	1	0	3	1	0	0	1	0	4	11
PHF	0.25	#####	#####	0.25	#####	0.38	0.25	#####	#####	0.25	#####	1.00	0.39
Movement PHF		0.25			0.33			0.25			0.63		0.39

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	1	0	0	2	0	1	0	0	0	0	0	4
Total	0	1	0	0	5	0	1	0	0	0	2	0	9

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.44**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	3	0	1	0	0	0	2	0	7
PHF	#####	0.25	#####	#####	0.375	#####	0.25	#####	#####	#####	0.5	#####	0.44
Movement PHF		0.25			0.38			0.25			0.50		0.44

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Massachusetts Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	70	4	12	22	6	5	178	12	6	4	13	339
7:15 AM	7	71	5	36	17	13	6	171	12	6	6	15	365
7:30 AM	9	114	9	26	22	14	13	212	18	10	13	9	469
7:45 AM	13	116	5	17	19	28	17	165	24	16	12	11	443
8:00 AM	3	104	8	19	19	18	16	187	22	15	15	19	445
8:15 AM	9	103	6	23	15	9	10	199	9	3	6	7	399
8:30 AM	8	87	5	10	13	8	12	153	6	6	7	8	323
8:45 AM	3	95	5	12	10	6	11	148	5	6	8	11	320
Total	59	760	47	155	137	102	90	1,413	108	68	71	93	3,103

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	34	437	28	85	75	69	56	763	73	44	46	46	1,756
PHF	0.65	0.94	0.78	0.82	0.85	0.62	0.82	0.90	0.76	0.69	0.77	0.61	0.94
Movement PHF		0.93			0.89			0.92			0.69		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	6	180	27	24	15	37	15	136	9	13	28	8	498
4:15 PM	9	173	12	17	16	25	10	112	8	18	25	11	436
4:30 PM	13	172	25	13	11	19	14	133	7	21	26	16	470
4:45 PM	10	179	18	16	14	16	11	158	10	22	39	9	502
5:00 PM	17	166	20	20	12	26	14	126	4	11	32	16	464
5:15 PM	7	178	20	20	13	21	21	129	9	12	32	10	472
5:30 PM	8	177	21	19	14	20	15	139	9	17	24	9	472
5:45 PM	8	180	14	14	8	15	10	159	5	7	30	16	466
Total	78	1405	157	143	103	179	110	1,092	61	121	236	95	3,780

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	42	700	79	75	53	83	61	552	32	62	127	44	1910
PHF	0.62	0.978	0.94	0.938	0.946	0.798	0.726	0.873	0.8	0.705	0.814	0.688	0.95
Movement PHF		0.99			0.91			0.90			0.83		0.95

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Massachusetts Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Massachusetts Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	3	0	0	1	0	5

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	2	0	0	1	0	4
PHF	#####	#####	#####	#####	0.25	#####	#####	0.50	#####	#####	0.25	#####	0.50
Movement PHF	#DIV/0!			0.25			0.50			0.25			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	2	1	0	1	0	0	5

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	1	1	0	1	0	0	3
PHF	#####	#####	#####	#####	#####	#####	0.25	0.25	#####	0.25	#####	#####	0.75
Movement PHF	#DIV/0!			#DIV/0!			0.50			0.25			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ West St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ West St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	14	0	9	1	61	0	0	0	0	0	48	16	149
7:15 AM	11	0	9	1	111	0	1	0	0	1	53	17	204
7:30 AM	26	0	12	3	107	1	0	0	0	1	70	10	230
7:45 AM	24	0	11	0	90	0	0	0	0	0	63	11	199
8:00 AM	17	0	12	2	97	0	0	0	0	0	76	13	217
8:15 AM	27	0	11	2	134	0	0	0	0	0	84	17	275
8:30 AM	18	0	18	2	100	0	0	0	0	0	91	25	254
8:45 AM	18	0	14	2	78	0	0	0	0	1	97	13	223
Total	155	0	96	13	778	1	1	0	0	3	582	122	1,751

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	80	0	55	8	409	0	0	0	0	1	348	68	969
PHF	0.74	#####	0.76	1.00	0.76	#####	#####	#####	#####	0.25	0.90	0.68	0.88
Movement PHF		0.89			0.77			#DIV/0!			0.90		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	21	1	35	4	131	0	1	0	0	1	182	27	403
4:15 PM	30	0	27	3	115	0	0	0	0	0	173	21	369
4:30 PM	22	1	36	0	131	0	0	0	0	0	145	35	370
4:45 PM	16	0	34	2	111	0	0	0	0	1	187	26	377
5:00 PM	35	0	30	0	133	0	0	0	2	2	170	22	394
5:15 PM	25	0	35	5	120	0	1	0	0	2	177	25	390
5:30 PM	24	0	23	3	124	0	1	0	1	2	174	14	366
5:45 PM	16	0	23	2	127	0	1	0	0	0	148	37	354
Total	189	2	243	19	992	0	4	0	3	8	1,356	207	3,023

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	98	1	135	7	495	0	1	0	2	5	679	108	1531
PHF	0.70	0.25	0.938	0.35	0.93	#####	0.25	#####	0.25	0.625	0.908	0.771	0.97
Movement PHF		0.90			0.94			0.38			0.93		0.97

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ West St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ West St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	2	0	1	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	1	0	0	0	0	0	1	0	4

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	2	0	1	0	0	0	0	0	0	0	3
PHF	#####	#####	0.25	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF		0.25			0.25			#DIV/0!			#DIV/0!		0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	0	0	0	0	5	0	0	1	0	0	1	1	8

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	4	0	0	0	0	0	1	0	5
PHF	#####	#####	#####	#####	0.5	#####	#####	#####	#####	#####	0.25	#####	0.63
Movement PHF		#DIV/0!			0.50			#DIV/0!			0.25		0.63

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ New Jersey Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ New Jersey Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	16	2	8	4	53	3	6	8	8	9	37	14	168
7:15 AM	15	3	7	3	84	3	6	4	33	5	44	10	217
7:30 AM	23	6	11	3	87	2	6	11	18	8	59	16	250
7:45 AM	23	4	7	6	69	4	7	9	16	6	55	12	218
8:00 AM	13	5	14	5	84	6	6	5	20	13	66	17	254
8:15 AM	29	5	9	2	95	11	6	10	23	8	67	20	285
8:30 AM	27	6	8	6	80	6	5	5	14	13	85	16	271
8:45 AM	25	6	7	4	59	10	9	3	9	10	86	21	249
Total	171	37	71	33	611	45	51	55	141	72	499	126	1,912

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	94	22	38	17	318	33	26	23	66	44	304	74	1,059
PHF	0.81	0.92	0.68	0.71	0.84	0.75	0.72	0.58	0.72	0.85	0.88	0.88	0.93
Movement PHF		0.90			0.85			0.74			0.90		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	11	11	17	1	124	11	10	4	17	21	174	19	420
4:15 PM	18	3	12	3	92	8	6	10	22	24	161	18	377
4:30 PM	16	9	12	5	116	5	5	12	12	30	140	16	378
4:45 PM	12	7	12	5	79	3	5	5	20	27	181	15	371
5:00 PM	16	7	6	3	114	11	4	7	17	29	157	25	396
5:15 PM	12	13	7	2	109	4	4	2	17	30	165	20	385
5:30 PM	15	4	13	0	119	10	7	10	13	27	145	16	379
5:45 PM	20	9	16	1	106	7	7	5	17	33	138	13	372
Total	120	63	95	20	859	59	48	55	135	221	1,261	142	3,078

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	57	30	53	14	411	27	26	31	71	102	656	68	1546
PHF	0.79	0.682	0.779	0.7	0.829	0.614	0.65	0.646	0.807	0.85	0.906	0.895	0.92
Movement PHF		0.90			0.83			0.84			0.93		0.92

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ New Jersey Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ New Jersey Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:15 AM	0	1	0	0	1	0	0	0	0	2	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	3	0	0	2	0	2	0	0	8

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	3	0	0	2	0	2	0	0	8
PHF	#####	0.25	#####	#####	0.75	#####	#####	0.50	#####	0.25	#####	#####	0.50
Movement PHF		0.25			0.75			0.50			0.25		0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	2	0	0	1	0	0	0	0	3
5:45 PM	0	3	0	0	4	0	0	0	0	0	0	0	7
Total	0	3	0	0	7	0	0	1	0	0	2	0	13

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.43**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	0	0	7	0	0	1	0	0	1	0	12
PHF	#####	0.25	#####	#####	0.438	#####	#####	0.25	#####	#####	0.25	#####	0.43
Movement PHF		0.25			0.44			0.25			0.25		0.43

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Buena Vista Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	3	10	10	12	54	2	3	60	4	6	32	4	200
7:15 AM	1	11	8	14	83	3	3	60	10	5	47	4	249
7:30 AM	5	8	18	17	81	2	3	47	8	6	51	10	256
7:45 AM	6	24	15	20	79	3	5	54	10	6	44	15	281
8:00 AM	5	28	21	25	76	2	6	52	12	6	61	14	308
8:15 AM	9	19	24	22	87	2	4	35	9	5	77	11	304
8:30 AM	4	16	23	18	76	4	7	36	7	4	79	9	283
8:45 AM	9	19	25	11	57	5	7	46	14	6	89	16	304
Total	42	135	144	139	593	23	38	390	74	44	480	83	2,185

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	27	82	93	76	296	13	24	169	42	21	306	50	1,199
PHF	0.75	0.73	0.93	0.76	0.85	0.65	0.86	0.81	0.75	0.88	0.86	0.78	0.97
Movement PHF		0.94			0.87			0.84			0.85		0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	5	56	34	12	95	5	7	41	17	14	164	14	464
4:15 PM	5	45	31	14	92	7	4	44	7	17	143	10	419
4:30 PM	7	56	40	10	87	9	7	42	10	15	137	8	428
4:45 PM	10	41	26	17	78	4	3	36	12	16	163	14	420
5:00 PM	13	45	31	16	90	13	8	51	11	9	151	8	446
5:15 PM	13	50	34	20	77	8	5	49	17	14	139	10	436
5:30 PM	12	51	28	21	95	9	5	40	16	17	142	13	449
5:45 PM	9	61	36	16	86	7	6	40	16	13	126	11	427
Total	74	405	260	126	700	62	45	343	106	115	1,165	88	3,489

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	47	207	129	73	348	37	24	180	60	53	558	42	1758
PHF	0.90	0.848	0.896	0.869	0.916	0.712	0.75	0.882	0.882	0.779	0.924	0.808	0.98
Movement PHF		0.90			0.92			0.93			0.95		0.98

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Buena Vista Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	2	0	0	1	0	0	0	0	3
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	1	0	0	3	0	0	2	0	0	1	0	7

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.42**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	2	0	0	1	0	0	1	0	5
PHF	#####	0.25	#####	#####	0.25	#####	#####	0.25	#####	#####	0.25	#####	0.42
Movement PHF		0.25			0.25			0.25			0.25		0.42

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	2	1	0	0	0	0	3	0	6

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	0	0	0	0	2	0	4
PHF	#####	#####	#####	#####	0.5	#####	#####	#####	#####	#####	0.5	#####	0.50
Movement PHF		#DIV/0!			0.50			#DIV/0!			0.50		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Olive St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Olive St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	10	5	10	2	79	4	4	4	2	1	42	3	166
7:15 AM	5	8	4	1	85	6	6	3	1	4	54	5	182
7:30 AM	1	10	2	4	93	5	7	1	0	1	71	3	198
7:45 AM	4	12	5	7	112	5	1	2	1	4	64	4	221
8:00 AM	13	8	20	7	96	12	12	2	3	4	74	6	257
8:15 AM	5	5	4	5	96	10	2	3	3	9	98	7	247
8:30 AM	6	5	4	2	99	6	9	3	3	6	93	3	239
8:45 AM	7	11	9	8	68	12	6	0	3	5	102	5	236
Total	51	64	58	36	728	60	47	18	16	34	598	36	1,746

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	31	29	37	22	359	40	29	8	12	24	367	21	979
PHF	0.60	0.66	0.46	0.69	0.91	0.83	0.60	0.67	1.00	0.67	0.90	0.75	0.95
Movement PHF		0.59			0.92			0.72			0.90		0.95

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	15	19	12	4	97	11	6	0	4	7	161	7	343
4:15 PM	24	16	9	5	103	15	9	4	0	9	150	5	349
4:30 PM	14	8	7	8	105	7	13	2	4	15	143	6	332
4:45 PM	11	13	13	7	89	18	3	4	4	10	170	5	347
5:00 PM	18	17	8	3	97	6	4	2	1	11	146	3	316
5:15 PM	15	24	5	8	102	8	2	4	2	15	144	6	335
5:30 PM	12	10	13	2	102	13	7	2	2	7	164	4	338
5:45 PM	14	14	10	4	93	7	7	2	6	10	135	5	307
Total	123	121	77	41	788	85	51	20	23	84	1,213	41	2,667

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	64	56	41	24	394	51	31	10	12	41	624	23	1371
PHF	0.67	0.737	0.788	0.75	0.938	0.708	0.596	0.625	0.75	0.683	0.918	0.821	0.98
Movement PHF		0.82			0.95			0.70			0.93		0.98

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Olive St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Olive St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	1	1	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	2	1	0	0	0	0	2	0	6

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.42**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	1	1	0	0	0	0	2	0	5
PHF	0.25	#####	#####	#####	0.25	0.25	#####	#####	#####	#####	0.25	#####	0.42
Movement PHF		0.25			0.25			#DIV/0!			0.25		0.42

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	0	0	0	0	4	0	0	0	0	0	3	0	7

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	0	0	0	0	3	0	5
PHF	#####	#####	#####	#####	0.5	#####	#####	#####	#####	#####	0.75	#####	0.63
Movement PHF		#DIV/0!			0.50			#DIV/0!			0.75		0.63

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	19	56	10	14	56	7	10	138	9	6	26	18	369
7:15 AM	7	60	12	18	64	4	10	140	28	5	37	21	406
7:30 AM	13	84	16	12	65	10	16	168	26	12	45	20	487
7:45 AM	11	86	24	21	83	9	16	139	31	9	48	20	497
8:00 AM	16	114	14	15	60	5	19	147	45	22	60	41	558
8:15 AM	15	74	23	12	64	8	26	158	38	17	69	18	522
8:30 AM	21	76	16	24	65	10	14	111	25	18	61	34	475
8:45 AM	11	78	23	25	52	9	17	124	24	16	70	39	488
Total	113	628	138	141	509	62	128	1,125	226	105	416	211	3,802

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	55	358	77	60	272	32	77	612	140	60	222	99	2,064
PHF	0.86	0.79	0.80	0.71	0.82	0.80	0.74	0.91	0.78	0.68	0.80	0.60	0.92
Movement PHF		0.85			0.81			0.93			0.77		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	16	140	36	21	64	16	21	99	33	31	95	37	609
4:15 PM	19	147	17	24	78	13	26	87	36	33	118	30	628
4:30 PM	18	160	24	22	69	21	24	105	31	32	128	26	660
4:45 PM	11	126	27	16	70	23	28	81	35	30	120	35	602
5:00 PM	15	184	21	13	79	13	30	139	31	28	106	28	687
5:15 PM	19	192	23	15	75	20	11	114	30	18	84	23	624
5:30 PM	23	150	25	26	69	19	6	102	33	30	141	41	665
5:45 PM	13	121	33	19	57	8	12	89	37	30	96	32	547
Total	134	1220	206	156	561	133	158	816	266	232	888	252	5,022

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	68	652	96	70	293	75	75	436	129	106	451	127	2578
PHF	0.74	0.849	0.889	0.673	0.927	0.815	0.625	0.784	0.921	0.883	0.8	0.774	0.94
Movement PHF		0.87			0.96			0.80			0.81		0.94

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	3	0	0	3	1	0	4	0	11

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	0	3	0	0	3	0	8
PHF	#####	#####	#####	#####	0.25	#####	#####	0.38	#####	#####	0.75	#####	0.50
Movement PHF	#DIV/0!			0.25			0.38			0.75			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	1	1	0	0	3
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	1	0	0	6	0	8
5:00 PM	0	0	0	0	1	0	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	3	0	0	0	0	0	1	0	4
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	8	0	0	4	1	2	7	0	22

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	5	0	0	3	0	1	7	0	16
PHF	#####	#####	#####	#####	0.417	#####	#####	0.375	#####	0.25	0.292	#####	0.50
Movement PHF	#DIV/0!			0.42			0.38			0.33			0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Mid-Block Pedestrian Crossing

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Mid-Block Pedestrian Crossing

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	0	0	1	68	0	0	0	7	0	41	3	122
7:15 AM	0	1	0	0	81	2	0	0	1	0	56	1	142
7:30 AM	0	0	0	1	86	1	0	0	3	0	75	0	166
7:45 AM	1	0	0	1	109	2	0	0	3	0	84	2	202
8:00 AM	1	0	1	1	76	3	0	1	2	0	90	1	176
8:15 AM	1	0	1	0	82	2	1	0	1	2	108	5	203
8:30 AM	0	0	0	0	97	5	0	0	2	0	88	3	195
8:45 AM	4	0	1	2	77	7	0	0	1	1	102	7	202
Total	9	1	3	6	676	22	1	1	20	3	644	22	1,408

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	0	2	2	364	12	1	1	8	2	370	11	776
PHF	0.75	#####	0.50	0.50	0.83	0.60	0.25	0.25	0.67	0.25	0.86	0.55	0.96
Movement PHF		0.63			0.84			0.83			0.83		0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	5	0	1	2	97	10	0	0	2	2	142	8	269
4:15 PM	9	0	1	4	104	9	0	0	2	5	149	5	288
4:30 PM	1	0	1	0	109	5	0	0	0	3	168	5	292
4:45 PM	1	1	0	2	105	2	1	0	1	1	166	5	285
5:00 PM	3	0	1	1	102	3	1	0	0	0	148	9	268
5:15 PM	3	0	2	3	107	3	0	0	0	0	105	9	232
5:30 PM	3	0	0	0	110	2	1	0	1	2	159	11	289
5:45 PM	0	0	0	1	82	1	0	0	2	0	132	9	227
Total	25	1	6	13	816	35	3	0	8	13	1,169	61	2,150

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	16	1	3	8	415	26	1	0	5	11	625	23	1134
PHF	0.44	0.25	0.75	0.5	0.952	0.65	0.25	#####	0.625	0.55	0.93	0.719	0.97
Movement PHF		0.50			0.96			0.75			0.94		0.97

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Mid-Block Pedestrian Crossing

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Mid-Block Pedestrian Crossing

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	1	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.25	#####	0.25
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			0.25			0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	1	0	2	0	0	2	0	7

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	2	0	0	2	0	5
PHF	#####	0.25	#####	#####	#####	#####	#####	0.25	#####	#####	0.5	#####	0.63
Movement PHF	0.25			#DIV/0!			0.25			0.50			0.63

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Grove St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Grove St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	5	0	10	79	66	0	1	0	0	1	35	1	198
7:15 AM	3	0	16	69	75	0	1	0	0	0	46	4	214
7:30 AM	7	0	16	72	85	0	0	0	0	0	65	7	252
7:45 AM	6	0	36	90	98	0	1	0	0	1	73	7	312
8:00 AM	10	0	34	84	79	0	0	0	0	0	79	7	293
8:15 AM	9	0	31	63	75	0	0	0	0	1	94	10	283
8:30 AM	12	0	10	56	86	0	0	0	0	0	80	8	252
8:45 AM	15	0	22	48	75	0	0	0	0	0	84	11	255
Total	67	0	175	561	639	0	3	0	0	3	556	55	2,059

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	32	0	117	309	337	0	1	0	0	2	311	31	1,140
PHF	0.80	#####	0.81	0.86	0.86	#####	0.25	#####	#####	0.50	0.83	0.78	0.91
Movement PHF		0.85			0.86			0.25			0.82		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	15	0	58	37	91	0	0	0	0	0	134	8	343
4:15 PM	14	0	72	50	99	0	2	0	0	1	135	7	380
4:30 PM	13	0	65	55	98	0	1	0	0	0	159	10	401
4:45 PM	18	0	53	33	85	1	2	0	0	1	150	13	356
5:00 PM	12	0	62	28	86	0	0	1	0	0	136	7	332
5:15 PM	20	0	53	38	92	0	2	0	0	0	108	8	321
5:30 PM	19	0	68	41	93	0	0	0	0	0	151	9	381
5:45 PM	12	0	59	40	65	0	2	0	0	0	122	9	309
Total	123	0	490	322	709	1	9	1	0	2	1,095	71	2,823

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	60	0	248	175	373	1	5	0	0	2	578	38	1480
PHF	0.83	#####	0.861	0.795	0.942	0.25	0.625	#####	#####	0.5	0.909	0.731	0.92
Movement PHF		0.90			0.90			0.63			0.91		0.92

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Grove St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Grove St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	0	0	0	0	1	3

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	0	0	0	0	0	0	0	1	2
PHF	#####	#####	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25	0.50
Movement PHF	#DIV/0!			0.25			#DIV/0!			0.25			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	2	3
5:00 PM	0	0	2	0	0	0	0	1	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	2
Total	2	0	3	1	0	0	0	1	0	0	3	2	12

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	2	0	0	0	0	1	0	0	3	2	9
PHF	0.25	#####	0.25	#####	#####	#####	#####	0.25	#####	#####	0.375	0.25	0.75
Movement PHF	0.38			#DIV/0!			0.25			0.63			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Kempf St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Kempf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	64	26	23	0	78	21	27	0	239
7:15 AM	0	0	0	1	55	29	30	0	84	33	28	0	260
7:30 AM	0	0	0	0	74	33	35	0	86	30	43	0	301
7:45 AM	1	0	0	0	91	38	38	0	94	38	65	0	365
8:00 AM	0	0	0	0	72	43	29	0	91	53	56	0	344
8:15 AM	0	0	0	0	57	25	35	0	75	49	68	0	309
8:30 AM	1	0	0	0	79	20	17	0	57	33	58	0	265
8:45 AM	0	0	0	0	66	18	25	0	52	37	66	0	264
Total	2	0	0	1	558	232	232	0	617	294	411	0	2,347

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	294	139	137	0	346	170	232	0	1,319
PHF	0.25	#####	#####	#####	0.81	0.81	0.90	#####	0.92	0.80	0.85	#####	0.90
Movement PHF		0.25			0.84			0.91			0.86		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	71	39	39	0	49	86	104	0	388
4:15 PM	0	0	0	0	73	33	28	0	80	98	101	1	414
4:30 PM	0	0	0	0	59	41	35	0	93	111	111	0	450
4:45 PM	0	0	0	0	51	54	27	0	64	105	101	0	402
5:00 PM	0	0	0	0	45	35	36	0	73	78	118	0	385
5:15 PM	2	0	0	2	64	50	20	0	66	76	85	2	367
5:30 PM	0	0	0	0	47	38	43	0	84	87	137	0	436
5:45 PM	0	0	0	0	48	48	29	0	61	81	96	0	363
Total	2	0	0	2	458	338	257	0	570	722	853	3	3,205

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	254	167	129	0	286	400	417	1	1654
PHF	#####	#####	#####	#####	0.87	0.773	0.827	#####	0.769	0.901	0.939	0.25	0.92
Movement PHF		#DIV/0!			0.96			0.81			0.92		0.92

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Kempf St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Kempf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	0	0	0	0	0	0	1

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	0	0	0	0	0	1
PHF	#####	#####	#####	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			0.25			#DIV/0!			#DIV/0!			0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	1	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	1	0	0	0	1	3	0	7

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.42**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	1	0	0	0	1	2	0	5
PHF	#####	#####	#####	#####	0.25	0.25	#####	#####	#####	0.25	0.25	#####	0.42
Movement PHF	#DIV/0!			0.25			#DIV/0!			0.38			0.42

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Columbus Pl

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Columbus Pl

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	0	6	0	68	3	18	1	10	1	44	6	158
7:15 AM	0	0	2	7	65	0	16	0	12	2	63	5	172
7:30 AM	0	0	7	14	84	1	29	0	8	1	67	10	221
7:45 AM	1	0	19	32	91	4	31	4	6	4	74	18	284
8:00 AM	1	0	13	9	84	4	32	2	12	1	63	6	227
8:15 AM	1	0	7	2	77	3	18	1	8	0	95	2	214
8:30 AM	0	0	7	3	63	1	10	0	3	1	72	1	161
8:45 AM	3	0	8	1	62	1	11	1	5	0	70	2	164
Total	7	0	69	68	594	17	165	9	64	10	548	50	1,601

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	0	46	57	336	12	110	7	34	6	299	36	946
PHF	0.75	#####	0.61	0.45	0.92	0.75	0.86	0.44	0.71	0.38	0.79	0.50	0.83
Movement PHF		0.61			0.80			0.82			0.88		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	7	3	77	2	11	1	5	3	120	6	236
4:15 PM	1	0	8	4	77	6	14	0	4	2	128	3	247
4:30 PM	1	0	4	5	67	3	8	0	8	5	132	5	238
4:45 PM	1	0	3	4	78	6	19	0	13	2	114	5	245
5:00 PM	1	0	4	2	59	3	15	3	5	4	132	8	236
5:15 PM	3	0	8	3	68	7	21	2	11	3	92	6	224
5:30 PM	2	0	5	2	74	5	11	1	4	4	140	9	257
5:45 PM	0	0	4	6	67	2	20	1	6	7	111	4	228
Total	10	0	43	29	567	34	119	8	56	30	969	46	1,911

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	4	0	22	16	299	17	52	1	30	12	494	19	966
PHF	1.00	#####	0.688	0.8	0.958	0.708	0.684	0.25	0.577	0.6	0.936	0.792	0.98
Movement PHF		0.72			0.94			0.65			0.92		0.98

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Broadway @ Columbus Pl

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Broadway @ Columbus Pl

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	0	0	0	0	0	2

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	1	0	0	0	0	0	0	0	2
PHF	#####	#####	#####	0.25	0.25	#####	#####	#####	#####	#####	#####	#####	0.50
Movement PHF	#DIV/0!			0.50			#DIV/0!			#DIV/0!			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	4	0	0	0	0	0	2	0	6

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.42**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	0	0	0	2	0	5
PHF	#####	#####	#####	#####	0.25	#####	#####	#####	#####	#####	0.25	#####	0.42
Movement PHF	#DIV/0!			0.25			#DIV/0!			0.25			0.42

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Buena Vista Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	5	13	1	7	9	16	0	82	2	3	0	6	144
7:15 AM	3	13	0	9	11	24	1	78	2	4	5	7	157
7:30 AM	3	15	2	13	16	25	3	72	1	4	1	7	162
7:45 AM	8	22	2	10	15	34	9	78	2	4	1	11	196
8:00 AM	4	30	3	9	25	46	0	76	1	8	2	12	216
8:15 AM	9	27	0	5	16	39	1	76	0	3	0	10	186
8:30 AM	2	20	1	10	13	49	2	68	3	6	2	9	185
8:45 AM	2	18	1	10	6	33	3	78	0	6	1	7	165
Total	36	158	10	73	111	266	19	608	11	38	12	69	1,411

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	23	99	6	34	69	168	12	298	6	21	5	42	783
PHF	0.64	0.83	0.50	0.85	0.69	0.86	0.33	0.96	0.50	0.66	0.63	0.88	0.91
Movement PHF		0.86			0.85			0.89			0.77		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	6	52	0	23	20	36	2	90	7	10	3	24	273
4:15 PM	12	57	3	7	29	45	4	71	5	14	3	12	262
4:30 PM	4	55	3	14	24	38	2	64	6	6	4	15	235
4:45 PM	6	36	2	16	22	37	2	59	0	5	4	13	202
5:00 PM	8	52	2	18	28	41	2	88	4	9	0	16	268
5:15 PM	12	57	4	7	19	36	3	85	3	13	5	17	261
5:30 PM	10	67	4	11	18	33	0	84	4	11	3	14	259
5:45 PM	10	59	2	8	12	49	2	93	4	13	5	13	270
Total	68	435	20	104	172	315	17	634	33	81	27	124	2,030

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	40	235	12	44	77	159	7	350	15	46	13	60	1058
PHF	0.83	0.877	0.75	0.611	0.688	0.811	0.583	0.941	0.938	0.885	0.65	0.882	0.98
Movement PHF		0.89			0.80			0.94			0.85		0.98

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Buena Vista Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	2	0	0	0	0	4

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.33**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	1	0	0	0	2	0	0	0	0	4
PHF	#####	0.25	#####	0.25	#####	#####	#####	0.25	#####	#####	#####	#####	0.33
Movement PHF		0.25			0.25			0.25			#DIV/0!		0.33

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	2

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	1	0	0	0	0	2
PHF	#####	#####	#####	#####	0.25	#####	#####	0.25	#####	#####	#####	#####	0.50
Movement PHF		#DIV/0!			0.25			0.25			#DIV/0!		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Olive St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Olive St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	1	0	0	29	15	1	0	5	5	0	0	57
7:15 AM	2	0	0	1	45	20	0	0	2	3	3	0	76
7:30 AM	1	0	0	0	53	20	1	0	6	0	4	0	85
7:45 AM	0	1	0	1	60	23	1	0	4	4	3	0	97
8:00 AM	0	1	0	1	70	34	5	1	5	3	1	0	121
8:15 AM	0	0	0	0	61	21	4	0	7	1	1	0	95
8:30 AM	0	1	0	0	55	15	1	0	7	1	1	1	82
8:45 AM	2	0	0	1	41	23	2	0	6	2	3	0	80
Total	6	4	0	4	414	171	15	1	42	19	16	1	693

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	2	0	2	244	98	11	1	22	8	9	0	398
PHF	0.25	0.50	#####	0.50	0.87	0.72	0.55	0.25	0.79	0.50	0.56	#####	0.82
Movement PHF		0.75			0.82			0.77			0.61		0.82

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	1	4	61	33	4	1	8	5	0	0	117
4:15 PM	2	0	1	1	75	44	4	2	6	5	1	2	143
4:30 PM	0	1	2	0	60	22	3	2	6	6	5	0	107
4:45 PM	3	0	0	3	71	29	0	1	6	5	2	2	122
5:00 PM	3	1	0	0	73	32	1	1	5	2	0	0	118
5:15 PM	0	0	0	1	59	40	6	1	6	6	1	0	120
5:30 PM	2	2	0	4	52	22	2	0	6	5	2	2	99
5:45 PM	4	0	0	1	60	27	2	0	3	3	1	1	102
Total	14	4	4	14	511	249	22	8	46	37	12	7	928

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	8	2	3	4	279	127	8	6	23	18	8	4	490
PHF	0.67	0.5	0.375	0.333	0.93	0.722	0.5	0.75	0.958	0.75	0.4	0.5	0.86
Movement PHF		0.81			0.85			0.77			0.68		0.86

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Olive St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Olive St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	1	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	1	0	0	0	3

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	0	1	0	0	0	2
PHF	#####	0.25	#####	#####	#####	#####	#####	#####	0.25	#####	#####	#####	0.25
Movement PHF		0.25			#DIV/0!			0.25			#DIV/0!		0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	1	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.25	#####	0.25
Movement PHF		#DIV/0!			#DIV/0!			#DIV/0!			0.25		0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lemon Grove Way @ Grove St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lemon Grove Way @ Grove St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	6	2	5	51	5	4	3	78	0	8	7	173
7:15 AM	1	8	6	10	46	3	2	17	57	0	13	10	173
7:30 AM	5	9	2	12	40	6	2	24	51	3	19	22	195
7:45 AM	6	21	6	7	51	8	6	17	57	1	22	14	216
8:00 AM	5	20	4	5	58	10	6	34	56	1	18	9	226
8:15 AM	4	20	3	7	33	4	6	9	52	0	13	8	159
8:30 AM	3	10	3	2	38	3	3	8	46	2	15	15	148
8:45 AM	3	12	3	3	23	4	3	11	35	1	21	8	127
Total	31	106	29	51	340	43	32	123	432	8	129	93	1,417

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	17	58	18	34	195	27	16	92	221	5	72	55	810
PHF	0.71	0.69	0.75	0.71	0.84	0.68	0.67	0.68	0.97	0.42	0.82	0.63	0.90
Movement PHF		0.70			0.88			0.86			0.75		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	35	6	6	32	6	10	8	30	3	22	8	173
4:15 PM	10	45	5	6	28	4	14	8	34	1	23	8	186
4:30 PM	7	32	3	6	23	6	10	19	30	2	25	7	170
4:45 PM	5	37	3	4	23	4	8	27	22	3	23	8	167
5:00 PM	5	41	1	6	17	1	3	25	16	3	16	7	141
5:15 PM	8	36	7	7	38	7	10	13	20	2	18	7	173
5:30 PM	10	41	7	6	22	0	12	15	25	2	26	10	176
5:45 PM	5	29	1	5	22	5	6	8	33	2	28	6	150
Total	57	296	33	46	205	33	73	123	210	18	181	61	1,336

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	29	149	17	22	106	20	42	62	116	9	93	31	696
PHF	0.73	0.828	0.708	0.917	0.828	0.833	0.75	0.574	0.853	0.75	0.93	0.969	0.94
Movement PHF		0.81			0.84			0.93			0.98		0.94

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lemon Grove Way @ Grove St

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lemon Grove Way @ Grove St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	0	0	0	1

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	0	0	0	0	0	1
PHF	#####	#####	#####	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			0.25			#DIV/0!			#DIV/0!			0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	0	0	0	0	0	0	0	2

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	0	0	0	0	0	1
PHF	#####	#####	#####	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			0.25			#DIV/0!			#DIV/0!			0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-94 Eastbound Ramps @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: SR-94 Eastbound Ramps @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	81	25	0	0	0	108	190	0	44	1	3	452
7:15 AM	0	95	36	0	0	0	125	158	0	72	0	3	489
7:30 AM	0	107	54	0	0	0	124	129	0	92	0	4	510
7:45 AM	0	159	46	0	0	0	109	159	0	90	0	6	569
8:00 AM	0	135	44	0	0	0	130	151	0	83	0	3	546
8:15 AM	0	120	30	0	0	0	94	177	0	83	0	5	509
8:30 AM	0	129	41	0	0	0	100	149	0	72	0	2	493
8:45 AM	0	107	37	0	0	0	122	112	0	84	0	4	466
Total	0	933	313	0	0	0	912	1,225	0	620	1	30	4,034

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	521	174	0	0	0	457	616	0	348	0	18	2,134
PHF	#####	0.82	0.81	#####	#####	#####	0.88	0.87	#####	0.95	#####	0.75	0.94
Movement PHF		0.85			#DIV/0!			0.95			0.95		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	188	57	0	0	0	113	111	0	169	1	23	662
4:15 PM	0	203	32	0	0	0	89	154	0	174	1	15	668
4:30 PM	0	160	43	0	0	0	104	126	0	168	0	18	619
4:45 PM	0	168	32	0	0	0	79	120	0	169	0	17	585
5:00 PM	0	149	46	0	0	0	98	158	0	169	0	19	639
5:15 PM	0	186	40	0	0	0	87	101	0	171	1	16	602
5:30 PM	0	145	59	0	0	0	110	123	0	168	0	13	618
5:45 PM	0	159	52	0	0	0	106	102	0	171	0	18	608
Total	0	1358	361	0	0	0	786	995	0	1,359	3	139	5,001

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	719	164	0	0	0	385	511	0	680	2	73	2534
PHF	#####	0.885	0.719	#####	#####	#####	0.852	0.83	#####	0.977	0.5	0.793	0.95
Movement PHF		0.90			#DIV/0!			0.92			0.98		0.95

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

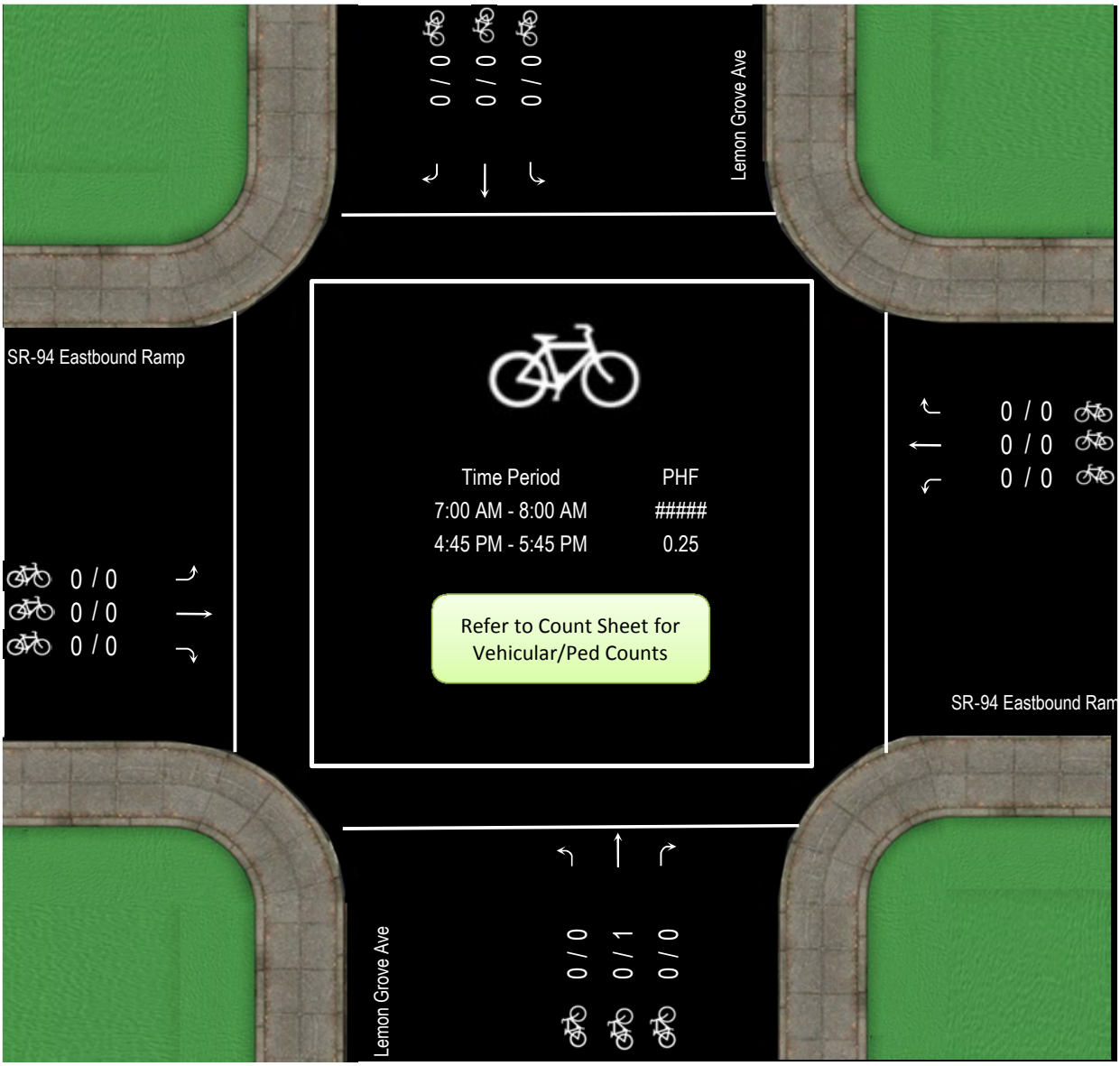
Location: SR-94 Eastbound Ramps @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*



RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: SR-94 Eastbound Ramps @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **#DIV/0!**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#DIV/0!
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	1

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	1	0	0	0	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			#DIV/0!			0.25			#DIV/0!			0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	116	9	0	0	7	2	0	7	165	67	3	11	387
7:15 AM	89	1	0	0	11	2	4	7	188	91	4	15	412
7:30 AM	87	5	0	0	9	1	0	23	152	107	2	23	409
7:45 AM	99	6	0	1	6	0	1	16	162	130	10	26	457
8:00 AM	94	8	0	0	16	1	5	16	167	129	10	16	462
8:15 AM	81	4	0	0	10	0	2	12	162	118	7	12	408
8:30 AM	72	7	0	0	9	2	6	16	135	106	6	18	377
8:45 AM	58	6	0	0	7	1	0	14	171	119	9	20	405
Total	696	46	0	1	75	9	18	111	1,302	867	51	141	3,317

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	369	20	0	1	42	4	10	62	669	457	26	80	1,740
PHF	0.93	0.63	#####	0.25	0.66	0.50	0.50	0.67	0.89	0.88	0.65	0.77	0.94
Movement PHF		0.93			0.69			0.93			0.85		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	43	11	1	0	8	0	2	10	156	193	25	35	484
4:15 PM	45	8	0	0	8	1	4	17	130	176	17	31	437
4:30 PM	64	5	0	0	9	4	2	9	139	203	13	34	482
4:45 PM	48	6	1	1	5	0	2	11	130	168	24	21	417
5:00 PM	57	9	0	1	8	1	4	12	160	164	21	26	463
5:15 PM	50	11	0	1	4	2	3	4	112	200	15	22	424
5:30 PM	40	9	0	1	9	2	3	13	164	179	18	22	460
5:45 PM	44	7	0	0	7	0	5	8	127	166	20	24	408
Total	391	66	2	4	58	10	25	84	1,118	1,449	153	215	3,575

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	200	30	2	1	30	5	10	47	555	740	79	121	1820
PHF	0.78	0.682	0.5	0.25	0.833	0.313	0.625	0.691	0.889	0.911	0.79	0.864	0.94
Movement PHF		0.84			0.69			0.91			0.93		0.94

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: North Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 10, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: North Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	1

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	1	0	0	0	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			#DIV/0!			0.25			#DIV/0!			0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	1	0	0	2

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	0	0	0	0	0	1	0	0	2
PHF	0.25	#####	#####	#####	#####	#####	#####	#####	#####	0.25	#####	#####	0.50
Movement PHF	0.25			#DIV/0!			#DIV/0!			0.25			0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	59	5	15	0	0	1	174	0	0	0	0	254
7:15 AM	0	64	3	19	0	2	3	180	0	0	0	0	271
7:30 AM	0	94	7	22	0	2	3	230	0	0	0	0	358
7:45 AM	0	120	11	23	0	2	7	169	0	0	0	0	332
8:00 AM	0	91	14	35	0	6	10	194	0	0	0	0	350
8:15 AM	0	64	18	37	0	3	10	186	0	0	0	0	318
8:30 AM	0	80	7	21	0	3	9	135	0	0	0	0	255
8:45 AM	0	74	11	20	0	2	10	115	0	0	0	0	232
Total	0	646	76	192	0	20	53	1,383	0	0	0	0	2,370

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	369	50	117	0	13	30	779	0	0	0	0	1,358
PHF	#####	0.77	0.69	0.79	#####	0.54	0.75	0.85	#####	#####	#####	#####	0.95
Movement PHF		0.80			0.79			0.87			#DIV/0!		0.95

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	161	11	15	0	5	9	155	0	0	0	0	356
4:15 PM	0	169	4	20	0	3	11	134	0	0	0	0	341
4:30 PM	0	174	15	23	0	4	11	156	0	0	0	0	383
4:45 PM	0	178	16	22	0	4	12	137	0	0	0	0	369
5:00 PM	0	171	11	20	0	4	11	141	0	0	0	0	358
5:15 PM	0	171	9	20	0	2	9	159	0	0	0	0	370
5:30 PM	0	209	13	28	0	2	6	120	0	0	0	0	378
5:45 PM	0	177	20	20	0	0	5	124	0	0	0	0	346
Total	0	1410	99	168	0	24	74	1,126	0	0	0	0	2,901

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	694	51	85	0	14	43	593	0	0	0	0	1480
PHF	#####	0.975	0.797	0.924	#####	0.875	0.896	0.932	#####	#####	#####	#####	0.97
Movement PHF		0.96			0.92			0.95			#DIV/0!		0.97

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	3	1	0	0	0	0	3	0	0	0	0	7

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	1	0	0	0	0	2	0	0	0	0	4
PHF	#####	0.25	0.25	#####	#####	#####	#####	0.50	#####	#####	#####	#####	0.50
Movement PHF		0.50			#DIV/0!			0.50			#DIV/0!		0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	7	0	0	1	0	9

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	4	0	0	1	0	6
PHF	#####	0.25	#####	#####	#####	#####	#####	0.5	#####	#####	0.25	#####	0.75
Movement PHF		0.25			#DIV/0!			0.50			0.25		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	3	42	1	2	12	3	3	183	35	17	4	9	314
7:15 AM	6	64	0	4	32	5	1	178	53	20	8	9	380
7:30 AM	10	62	2	5	14	5	0	221	45	25	14	22	425
7:45 AM	6	92	2	7	22	9	0	180	35	22	18	21	414
8:00 AM	10	65	4	12	44	9	6	171	37	32	39	25	454
8:15 AM	1	52	1	7	35	2	5	147	51	20	12	11	344
8:30 AM	5	62	3	2	14	3	1	130	25	29	5	17	296
8:45 AM	5	51	2	0	12	6	1	114	20	28	9	22	270
Total	46	490	15	39	185	42	17	1,324	301	193	109	136	2,897

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	32	283	8	28	112	28	7	750	170	99	79	77	1,673
PHF	0.80	0.77	0.50	0.58	0.64	0.78	0.29	0.85	0.80	0.77	0.51	0.77	0.92
Movement PHF		0.81			0.65			0.87			0.66		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	8	144	6	6	25	19	6	137	29	62	10	32	484
4:15 PM	8	143	5	2	10	13	1	116	23	43	6	27	397
4:30 PM	6	169	6	6	24	15	1	120	27	46	21	35	476
4:45 PM	13	147	0	5	24	10	0	125	30	54	16	26	450
5:00 PM	10	142	7	6	18	15	1	140	32	67	25	34	497
5:15 PM	8	148	4	1	16	13	3	132	43	50	19	27	464
5:30 PM	10	183	5	3	16	17	2	122	35	60	14	25	492
5:45 PM	6	123	5	4	22	10	1	117	24	55	9	17	393
Total	69	1199	38	33	155	112	15	1,009	243	437	120	223	3,653

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	41	620	16	15	74	55	6	519	140	231	74	112	1903
PHF	0.79	0.847	0.571	0.625	0.771	0.809	0.5	0.927	0.814	0.862	0.74	0.824	0.96
Movement PHF		0.85			0.92			0.93			0.83		0.96

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	2	0	0	1	0	0	2	0	6

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	2	0	0	1	0	0	2	0	6
PHF	#####	0.25	#####	#####	0.25	#####	#####	0.25	#####	#####	0.25	#####	0.75
Movement PHF		0.25			0.25			0.25			0.25		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	2	0	0	1	0	0	1	1	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	1	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	4	0	0	3	0	0	3	1	0	3	2	16

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	0	0	1	0	0	2	1	0	1	1	9
PHF	#####	0.375	#####	#####	0.25	#####	#####	0.5	0.25	#####	0.25	0.25	0.75
Movement PHF		0.38			0.25			0.75			0.50		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lincoln St @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lincoln St @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	53	9	16	0	4	9	205	0	0	0	0	296
7:15 AM	0	72	17	22	0	2	9	210	0	0	0	0	332
7:30 AM	0	80	12	21	0	1	6	245	0	0	0	0	365
7:45 AM	0	103	20	19	0	5	20	196	0	0	0	0	363
8:00 AM	0	88	18	28	0	6	34	186	0	0	0	0	360
8:15 AM	0	62	12	25	0	5	12	178	0	0	0	0	294
8:30 AM	0	87	7	14	0	3	6	142	0	0	0	0	259
8:45 AM	0	76	9	8	0	4	3	127	0	0	0	0	227
Total	0	621	104	153	0	30	99	1,489	0	0	0	0	2,496

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	343	67	90	0	14	69	837	0	0	0	0	1,420
PHF	#####	0.83	0.84	0.80	#####	0.58	0.51	0.85	#####	#####	#####	#####	0.97
Movement PHF		0.83			0.76			0.90			#DIV/0!		0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	199	26	15	0	7	9	157	0	0	0	0	413
4:15 PM	0	179	20	9	0	12	10	131	0	0	0	0	361
4:30 PM	0	208	22	10	0	5	7	138	0	0	0	0	390
4:45 PM	0	186	25	18	0	3	13	137	0	0	0	0	382
5:00 PM	0	195	29	17	0	7	9	156	0	0	0	0	413
5:15 PM	0	193	18	13	0	6	8	165	0	0	0	0	403
5:30 PM	0	232	28	14	0	5	8	145	0	0	0	0	432
5:45 PM	0	163	25	13	0	6	3	129	0	0	0	0	339
Total	0	1555	193	109	0	51	67	1,158	0	0	0	0	3,133

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	806	100	62	0	21	38	603	0	0	0	0	1630
PHF	#####	0.869	0.862	0.861	#####	0.75	0.731	0.914	#####	#####	#####	#####	0.94
Movement PHF		0.87			0.86			0.93			#DIV/0!		0.94

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lincoln St @ Lemon Grove Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lincoln St @ Lemon Grove Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	0	2	0	0	0	0	4

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.38**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	2	0	0	0	0	3
PHF	#####	0.25	#####	#####	#####	#####	#####	0.50	#####	#####	#####	#####	0.38
Movement PHF		0.25			#DIV/0!			0.50			#DIV/0!		0.38

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	3	0	0	0	0	1	5	0	0	0	0	9

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	1	3	0	0	0	0	6
PHF	#####	0.5	#####	#####	#####	#####	0.25	0.75	#####	#####	#####	#####	0.75
Movement PHF		0.50			#DIV/0!			0.50			#DIV/0!		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Kepmf St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Kepmf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	26	5	17	5	0	0	121	7	0	0	7	189
7:15 AM	8	35	4	13	1	0	1	138	7	3	1	11	222
7:30 AM	9	33	3	14	8	0	1	137	5	5	6	9	230
7:45 AM	12	65	12	8	4	0	1	119	9	14	3	10	257
8:00 AM	22	60	8	19	6	2	1	109	16	15	7	17	282
8:15 AM	13	36	5	7	4	0	2	76	8	12	3	18	184
8:30 AM	9	29	8	15	3	1	0	62	4	9	4	5	149
8:45 AM	17	29	4	11	4	0	1	69	12	5	1	9	162
Total	91	313	49	104	35	3	7	831	68	63	25	86	1,675

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	51	193	27	54	19	2	4	503	37	37	17	47	991
PHF	0.58	0.74	0.56	0.71	0.59	0.25	1.00	0.91	0.58	0.62	0.61	0.69	0.88
Movement PHF		0.75			0.69			0.93			0.65		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	17	81	26	8	2	0	0	65	9	7	5	19	239
4:15 PM	7	118	15	10	3	1	2	58	4	10	3	13	244
4:30 PM	9	118	25	8	5	1	1	56	5	9	8	16	261
4:45 PM	10	118	12	14	3	0	2	64	9	9	5	16	262
5:00 PM	16	91	21	10	2	2	4	57	6	6	8	17	240
5:15 PM	17	95	9	10	3	1	4	53	3	11	3	12	221
5:30 PM	18	97	27	12	7	0	1	47	10	6	6	14	245
5:45 PM	15	94	14	2	3	2	2	54	13	12	8	16	235
Total	109	812	149	74	28	7	16	454	59	70	46	123	1,947

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	42	445	73	42	13	4	9	235	24	34	24	62	1007
PHF	0.66	0.943	0.73	0.75	0.65	0.5	0.563	0.918	0.667	0.85	0.75	0.912	0.96
Movement PHF		0.92			0.87			0.89			0.91		0.96

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Kepmf St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Kepmf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	0	2	0	0	0	0	0	1	2	0	1	0	6

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	1	1	0	0	0	4
PHF	#####	0.50	#####	#####	#####	#####	#####	0.25	0.25	#####	#####	#####	0.50
Movement PHF		0.50			#DIV/0!			0.50			#DIV/0!		0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	0	0	1	0	1	0	0	3
4:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	0	0	0	2	0	2	1	0	8

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	1	0	2	1	0	6
PHF	#####	0.5	#####	#####	#####	#####	#####	0.25	#####	0.5	0.25	#####	0.50
Movement PHF		0.50			#DIV/0!			0.25			0.75		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Darryl St @ Kepmf St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Darryl St @ Kepmf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	25	2	7	0	0	0	109	0	0	0	0	143
7:15 AM	0	36	3	3	0	0	0	136	0	0	0	0	178
7:30 AM	0	35	3	2	0	1	1	139	0	0	0	0	181
7:45 AM	0	74	4	3	0	0	1	113	0	0	0	0	195
8:00 AM	0	73	4	3	0	2	0	119	0	0	0	0	201
8:15 AM	0	42	3	3	0	0	0	80	0	0	0	0	128
8:30 AM	0	40	0	5	0	0	1	57	0	0	0	0	103
8:45 AM	0	29	3	3	0	1	1	75	0	0	0	0	112
Total	0	354	22	29	0	4	4	828	0	0	0	0	1,241

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	218	14	11	0	3	2	507	0	0	0	0	755
PHF	#####	0.74	0.88	0.92	#####	0.38	0.50	0.91	#####	#####	#####	#####	0.94
Movement PHF		0.74			0.70			0.91			#DIV/0!		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	78	4	4	0	0	1	65	0	0	0	0	152
4:15 PM	0	114	6	1	0	1	0	57	0	0	0	0	179
4:30 PM	0	103	4	2	0	0	0	60	0	0	0	0	169
4:45 PM	0	106	8	4	0	1	0	62	0	0	0	0	181
5:00 PM	0	91	1	3	0	2	0	61	0	0	0	0	158
5:15 PM	0	94	7	3	0	0	0	46	0	0	0	0	150
5:30 PM	0	86	8	2	0	0	0	57	0	0	0	0	153
5:45 PM	0	89	8	5	0	1	0	62	0	0	0	0	165
Total	0	761	46	24	0	5	1	470	0	0	0	0	1,307

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	414	19	10	0	4	0	240	0	0	0	0	687
PHF	#####	0.908	0.594	0.625	#####	0.5	#####	0.968	#####	#####	#####	#####	0.95
Movement PHF		0.90			0.70			0.97			#DIV/0!		0.95

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Darryl St @ Kepmf St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Darryl St @ Kepmf St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	2	0	0	0	0	4

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	2	0	0	0	0	3
PHF	#####	0.25	#####	#####	#####	#####	#####	0.50	#####	#####	#####	#####	0.75
Movement PHF		0.25			#DIV/0!			0.50			#DIV/0!		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	0	0	0	0	2	0	0	0	0	5

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	1	0	0	0	0	1	0	0	0	0	3
PHF	#####	0.25	0.25	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.75
Movement PHF		0.50			#DIV/0!			0.25			#DIV/0!		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lincoln St @ Kempf St-Skyline Dr

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lincoln St @ Kempf St-Skyline Dr

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	20	4	3	6	2	1	103	23	10	5	2	181
7:15 AM	10	21	2	3	12	1	1	127	32	12	6	3	230
7:30 AM	7	30	2	5	16	1	2	134	29	10	2	2	240
7:45 AM	19	50	2	4	17	0	5	105	60	14	6	4	286
8:00 AM	22	49	6	6	28	7	0	106	87	28	11	4	354
8:15 AM	9	29	6	5	11	2	0	68	31	23	10	4	198
8:30 AM	3	34	3	1	7	0	1	56	20	19	9	3	156
8:45 AM	5	22	1	1	2	0	0	74	17	15	2	1	140
Total	77	255	26	28	99	13	10	773	299	131	51	23	1,785

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.78**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	58	150	12	18	73	9	8	472	208	64	25	13	1,110
PHF	0.66	0.75	0.50	0.75	0.65	0.32	0.40	0.88	0.60	0.57	0.57	0.81	0.78
Movement PHF		0.71			0.61			0.89			0.59		0.78

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	2	68	5	4	7	1	5	55	23	23	17	4	214
4:15 PM	8	103	7	0	11	1	2	50	18	29	18	5	252
4:30 PM	5	96	5	1	3	2	1	51	13	30	20	6	233
4:45 PM	6	102	2	4	8	1	1	53	18	30	14	8	247
5:00 PM	9	77	7	3	4	2	2	46	19	43	21	8	241
5:15 PM	5	86	5	1	5	1	1	43	17	27	15	2	208
5:30 PM	4	73	6	3	7	3	1	44	15	33	23	7	219
5:45 PM	5	81	7	4	8	1	1	49	14	31	23	6	230
Total	44	686	44	20	53	12	14	391	137	246	151	46	1,844

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	28	378	21	8	26	6	6	200	68	132	73	27	973
PHF	0.78	0.917	0.75	0.5	0.591	0.75	0.75	0.943	0.895	0.767	0.869	0.844	0.97
Movement PHF		0.90			0.77			0.95			0.81		0.97

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lincoln St @ Kempf St-Skyline Dr

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Lincoln St @ Kempf St-Skyline Dr

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	1	0	2	0	4
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	2	1	0	2	0	7

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.44**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	1	0	0	2	1	0	2	0	7
PHF	#####	0.25	#####	#####	0.25	#####	#####	0.50	0.25	#####	0.25	#####	0.44
Movement PHF		0.25			0.25			0.38			0.25		0.44

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	3	0	0	0	0	1	0	0	4
5:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	3	0	0	1	2	1	1	0	10

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.56**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	3	0	0	1	2	1	1	0	9
PHF	#####	0.25	#####	#####	0.25	#####	#####	0.25	0.5	0.25	0.25	#####	0.56
Movement PHF		0.25			0.25			0.38			0.50		0.56

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Washington St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Washington St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	4	7	3	0	13	10	3	2	0	42
7:15 AM	0	0	0	3	6	4	1	25	8	0	2	0	49
7:30 AM	0	0	0	4	7	2	1	25	12	2	7	2	62
7:45 AM	0	0	0	5	5	1	0	15	6	6	4	3	45
8:00 AM	0	0	0	5	9	0	1	18	9	4	9	3	58
8:15 AM	0	0	0	5	6	0	2	16	9	4	2	1	45
8:30 AM	0	0	0	3	5	0	0	13	8	4	6	2	41
8:45 AM	0	0	0	4	7	0	1	7	4	1	1	3	28
Total	0	0	0	33	52	10	6	132	66	24	33	14	370

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	17	27	7	3	83	35	12	22	8	214
PHF	#####	#####	#####	0.85	0.75	0.44	0.75	0.83	0.73	0.50	0.61	0.67	0.86
Movement PHF	#DIV/0!			0.91			0.80			0.66			0.86

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	3	4	0	0	5	4	10	13	3	42
4:15 PM	0	0	0	2	4	1	1	12	4	6	11	2	43
4:30 PM	0	0	0	2	9	1	2	9	1	7	16	5	52
4:45 PM	0	0	0	3	7	0	1	5	8	4	8	3	39
5:00 PM	0	0	0	3	9	2	3	9	4	10	11	4	55
5:15 PM	0	0	0	1	9	1	1	12	4	3	5	5	41
5:30 PM	0	0	0	5	5	0	0	15	7	6	11	6	55
5:45 PM	0	0	0	6	7	1	1	14	2	6	9	6	52
Total	0	0	0	25	54	6	9	81	34	52	84	34	379

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	15	30	4	5	50	17	25	36	21	203
PHF	#####	#####	#####	0.625	0.833	0.5	0.417	0.833	0.607	0.625	0.818	0.875	0.92
Movement PHF	#DIV/0!			0.88			0.82			0.82			0.92

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Ave @ Washington St

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Golden Ave @ Washington St

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	1	0	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.25	#####	#####	0.25
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			0.25			0.25

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	1

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	1	0	0	0	0	1
PHF	#####	#####	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.25
Movement PHF	#DIV/0!			#DIV/0!			0.25			#DIV/0!			0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Pacific Ave @ Buena Vista Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Pacific Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	13	2	4	0	2	3	69	3	1	0	6	104
7:15 AM	3	32	1	5	2	1	1	100	3	1	0	5	154
7:30 AM	2	40	3	5	2	1	2	93	0	2	1	5	156
7:45 AM	4	47	0	7	1	0	0	54	2	4	1	3	123
8:00 AM	4	26	0	5	1	1	0	67	4	2	3	1	114
8:15 AM	1	29	4	3	2	2	1	51	3	0	1	5	102
8:30 AM	2	33	3	6	1	0	1	46	1	1	0	7	101
8:45 AM	1	33	3	6	0	3	1	29	1	1	2	4	84
Total	18	253	16	41	9	10	9	509	17	12	8	36	938

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	13	145	4	22	6	3	3	314	9	9	5	14	547
PHF	0.81	0.77	0.33	0.79	0.75	0.75	0.38	0.79	0.56	0.56	0.42	0.70	0.88
Movement PHF		0.79			0.97			0.78			0.88		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	5	63	2	10	2	1	0	47	0	1	3	2	136
4:15 PM	8	80	5	6	3	2	1	37	1	2	0	5	150
4:30 PM	4	66	3	10	1	1	1	36	4	1	2	3	132
4:45 PM	6	58	7	11	3	2	2	44	2	2	3	2	142
5:00 PM	4	68	5	11	6	0	2	56	1	2	5	3	163
5:15 PM	7	88	4	4	3	0	0	31	2	5	3	5	152
5:30 PM	5	84	6	9	2	0	1	43	2	2	6	8	168
5:45 PM	8	68	4	6	4	1	0	34	2	1	2	7	137
Total	47	575	36	67	24	7	7	328	14	16	24	35	1,180

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	22	298	22	35	14	2	5	174	7	11	17	18	625
PHF	0.79	0.847	0.786	0.795	0.583	0.25	0.625	0.777	0.875	0.55	0.708	0.563	0.93
Movement PHF		0.86			0.75			0.79			0.72		0.93

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Pacific Ave @ Buena Vista Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Pacific Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:30 AM	1	0	0	0	0	1	0	0	1	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
Total	1	0	0	0	0	1	0	4	1	0	5	0	12

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.58**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	0	1	0	0	1	0	4	0	7
PHF	0.25	#####	#####	#####	#####	0.25	#####	#####	0.25	#####	0.50	#####	0.58
Movement PHF		0.25			0.25			0.25			0.50		0.58

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	1	0	0	1	0	3
5:15 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	2	1	0	2	1	0	2	0	0	2	0	11

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.58**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	1	0	1	0	0	2	0	0	2	0	7
PHF	#####	0.25	0.25	#####	0.25	#####	#####	0.5	#####	#####	0.5	#####	0.58
Movement PHF		0.50			0.25			0.50			0.50		0.58

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ New Jersey Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ New Jersey Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	6	2	6	24	0	1	16	3	2	13	2	79
7:15 AM	2	14	2	14	38	4	5	18	5	1	15	3	121
7:30 AM	2	9	7	14	33	2	11	24	3	0	27	5	137
7:45 AM	5	16	6	10	35	3	4	26	7	1	23	2	138
8:00 AM	4	20	4	15	40	5	10	22	2	2	30	6	160
8:15 AM	1	9	3	10	37	3	4	14	0	3	15	6	105
8:30 AM	2	17	5	5	19	4	0	13	2	1	23	1	92
8:45 AM	1	7	9	8	11	0	5	12	3	0	16	6	78
Total	21	98	38	82	237	21	40	145	25	10	162	31	910

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.87**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	13	59	19	53	146	14	30	90	17	4	95	16	556
PHF	0.65	0.74	0.68	0.88	0.91	0.70	0.68	0.87	0.61	0.50	0.79	0.67	0.87
Movement PHF		0.81			0.89			0.90			0.76		0.87

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	18	15	11	31	5	2	8	2	7	42	5	153
4:15 PM	5	27	16	5	23	5	5	13	2	6	34	11	152
4:30 PM	7	25	20	13	23	1	4	13	2	6	37	10	161
4:45 PM	6	29	17	11	24	3	4	21	3	5	44	4	171
5:00 PM	4	38	36	12	33	5	4	14	1	4	44	9	204
5:15 PM	6	22	11	8	32	8	4	16	2	5	55	13	182
5:30 PM	7	24	15	10	26	5	1	12	0	7	36	7	150
5:45 PM	3	30	14	9	20	4	3	15	2	5	31	5	141
Total	45	213	144	79	212	36	27	112	14	45	323	64	1,314

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	23	114	84	44	112	17	16	64	8	20	180	36	718
PHF	0.82	0.75	0.583	0.846	0.848	0.531	1	0.762	0.667	0.833	0.818	0.692	0.88
Movement PHF		0.71			0.87			0.79			0.81		0.88

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ New Jersey Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ New Jersey Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	1	0	1	1	0	0	0	2	5

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	1	0	0	0	2	4
PHF	#####	#####	#####	#####	0.25	#####	#####	0.25	#####	#####	#####	0.50	0.50
Movement PHF	#DIV/0!			0.25			0.25			0.50			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	0	0	0	0	0	0	0	1	0	3

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.38**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	1	0	0	0	0	0	0	0	0	1	0	3
PHF	0.25	0.25	#####	#####	#####	#####	#####	#####	#####	#####	0.25	#####	0.38
Movement PHF	0.50			#DIV/0!			#DIV/0!			0.25			0.38

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Buena Vista Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	12	5	17	27	5	3	40	4	0	12	6	131
7:15 AM	4	22	7	39	43	0	4	55	6	0	20	4	204
7:30 AM	3	23	20	29	43	3	6	67	4	2	36	7	243
7:45 AM	6	31	19	19	42	7	17	34	3	2	29	5	214
8:00 AM	4	16	12	29	64	11	10	41	2	0	47	3	239
8:15 AM	0	17	11	22	45	4	3	24	2	0	21	1	150
8:30 AM	3	17	9	17	25	7	4	25	1	0	22	3	133
8:45 AM	3	17	15	11	16	3	5	15	0	0	30	3	118
Total	23	155	98	183	305	40	52	301	22	4	217	32	1,432

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	17	92	58	116	192	21	37	197	15	4	132	19	900
PHF	0.71	0.74	0.73	0.74	0.75	0.48	0.54	0.74	0.63	0.50	0.70	0.68	0.93
Movement PHF		0.75			0.79			0.81			0.78		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	4	35	29	17	39	5	4	21	5	2	55	5	221
4:15 PM	6	48	26	12	28	4	3	16	0	1	46	8	198
4:30 PM	7	34	23	19	27	6	5	18	3	0	57	2	201
4:45 PM	2	35	29	16	33	6	2	22	3	1	54	9	212
5:00 PM	5	38	24	23	42	5	1	28	2	1	76	4	249
5:15 PM	4	48	28	15	38	6	3	14	2	3	60	8	229
5:30 PM	5	48	25	11	37	6	3	17	1	4	52	5	214
5:45 PM	5	48	22	7	35	5	3	20	0	4	44	2	195
Total	38	334	206	120	279	43	24	156	16	16	444	43	1,719

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	16	169	106	65	150	23	9	81	8	9	242	26	904
PHF	0.80	0.88	0.914	0.707	0.893	0.958	0.75	0.723	0.667	0.563	0.796	0.722	0.91
Movement PHF		0.91			0.85			0.79			0.85		0.91

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Central Ave @ Buena Vista Ave

Date of Count: *Thursday, March 03, 2016*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *16-0493*

RICK ENGINEERING COMPANY
Traffic Division

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: Central Ave @ Buena Vista Ave

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	2	1	4
7:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	0	1	1	3	0	0	2	1	10

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	0	1	0	3	0	0	2	1	8
PHF	#####	#####	#####	0.25	#####	0.25	#####	0.75	#####	#####	0.25	0.25	0.50
Movement PHF	#DIV/0!			0.50			0.75			0.25			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	2	0	0	2	0	6

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.38**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	1	0	0	0	0	2	0	3
PHF	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.25	#####	0.38
Movement PHF	#DIV/0!			0.25			#DIV/0!			0.25			0.38

RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

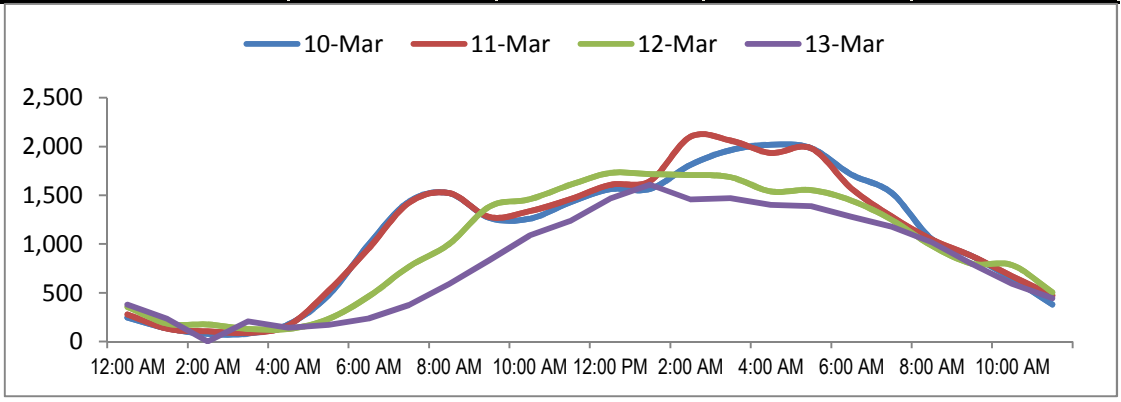
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 1. Massachusetts Ave between SR-94 Westbound Ramps and SR-94 Eastbound
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***23,962***
Highest Daily Traffic	***26,514***

Time			Hourly Volume			
			10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM	-	1:00 AM	244	278	356	377
1:00 AM	-	2:00 AM	133	131	183	230
2:00 AM	-	3:00 AM	78	105	175	0
3:00 AM	-	4:00 AM	82	90	130	207
4:00 AM	-	5:00 AM	176	165	129	143
5:00 AM	-	6:00 AM	475	521	232	170
6:00 AM	-	7:00 AM	996	955	463	237
7:00 AM	-	8:00 AM	1,434	1,422	768	373
8:00 AM	-	9:00 AM	1,521	1,523	1,000	591
9:00 AM	-	10:00 AM	1,268	1,277	1,383	835
10:00 AM	-	11:00 AM	1,259	1,337	1,459	1,088
11:00 AM	-	12:00 PM	1,425	1,458	1,605	1,234
12:00 PM	-	1:00 PM	1,562	1,607	1,728	1,464
1:00 PM	-	2:00 PM	1,565	1,648	1,717	1,607
2:00 PM	-	3:00 PM	1,812	2,100	1,708	1,456
3:00 PM	-	4:00 PM	1,963	2,061	1,685	1,471
4:00 PM	-	5:00 PM	2,018	1,934	1,539	1,401
5:00 PM	-	6:00 PM	1,983	1,982	1,553	1,387
6:00 PM	-	7:00 PM	1,712	1,571	1,446	1,279
7:00 PM	-	8:00 PM	1,525	1,283	1,249	1,180
8:00 PM	-	9:00 PM	1,051	1,047	983	1,018
9:00 PM	-	10:00 PM	876	877	798	793
10:00 PM	-	11:00 PM	644	669	784	591
11:00 PM	-	12:00 AM	379	473	504	443
Total			**26,181**	**26,514**	**23,577**	**19,575**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 1. Massachusetts Ave between SR-94 Westbound Ramps and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

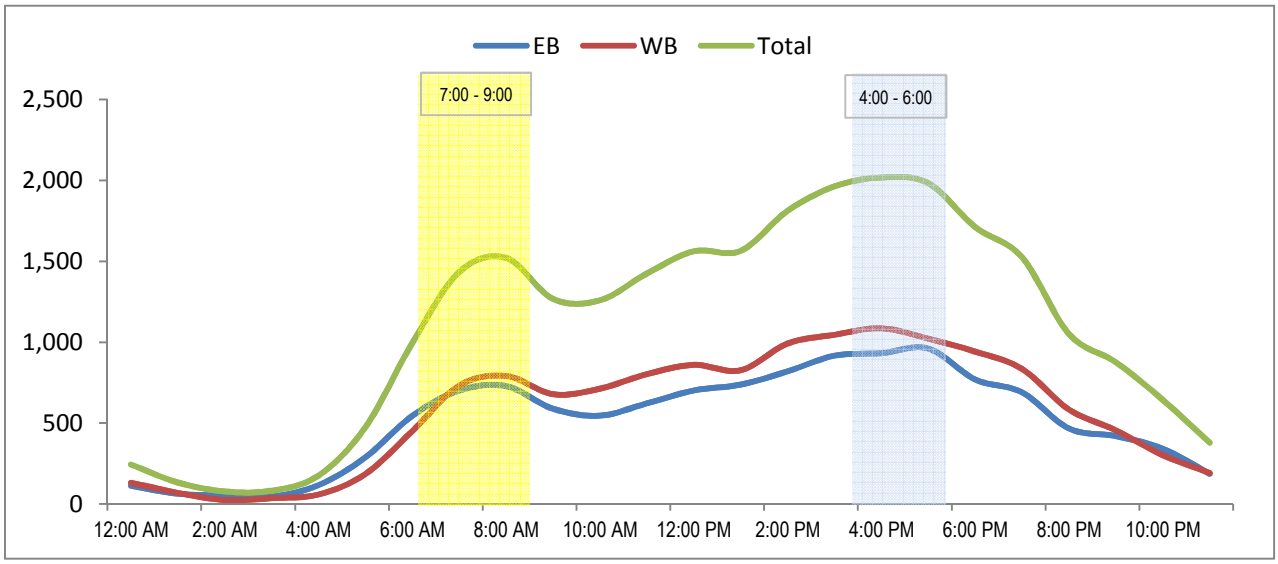
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***26,181***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	113	131	244
1:00 AM - 2:00 AM	64	69	133
2:00 AM - 3:00 AM	53	25	78
3:00 AM - 4:00 AM	46	36	82
4:00 AM - 5:00 AM	117	59	176
5:00 AM - 6:00 AM	289	186	475
6:00 AM - 7:00 AM	545	451	996
7:00 AM - 8:00 AM	702	732	1,434
8:00 AM - 9:00 AM	729	792	1,521
9:00 AM - 10:00 AM	589	679	1,268
10:00 AM - 11:00 AM	546	713	1,259
11:00 AM - 12:00 PM	622	803	1425
Total	**4,415**	**4,676**	**9,091**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	702	860	1,562
1:00 PM - 2:00 PM	738	827	1,565
2:00 PM - 3:00 PM	820	992	1,812
3:00 PM - 4:00 PM	917	1,046	1,963
4:00 PM - 5:00 PM	932	1,086	2,018
5:00 PM - 6:00 PM	961	1,022	1,983
6:00 PM - 7:00 PM	770	942	1,712
7:00 PM - 8:00 PM	690	835	1,525
8:00 PM - 9:00 PM	467	584	1,051
9:00 PM - 10:00 PM	420	456	876
10:00 PM - 11:00 PM	342	302	644
11:00 PM - 12:00 AM	187	192	379
Total	**7,946**	**9,144**	**17,090**

24-Hour EB Volume 12,361	***24-Hour WB Volume 13,820***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 1. Massachusetts Ave between SR-94 Westbound Ramps and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

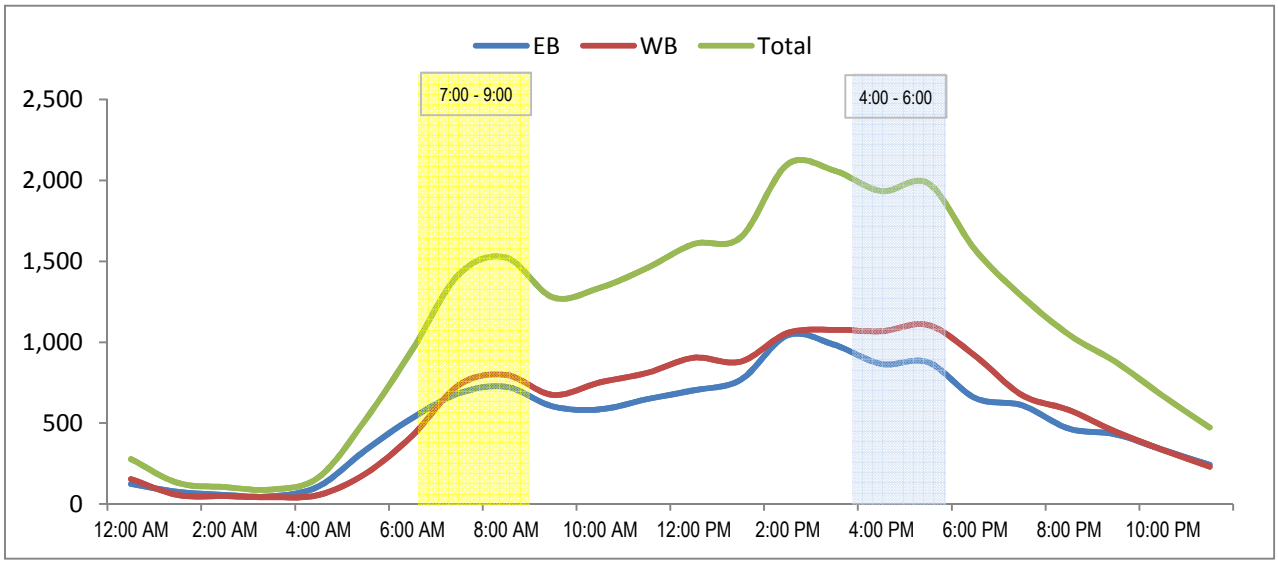
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*26,514*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	124	154	278
1:00 AM - 2:00 AM	75	56	131
2:00 AM - 3:00 AM	56	49	105
3:00 AM - 4:00 AM	48	42	90
4:00 AM - 5:00 AM	109	56	165
5:00 AM - 6:00 AM	333	188	521
6:00 AM - 7:00 AM	532	423	955
7:00 AM - 8:00 AM	685	737	1,422
8:00 AM - 9:00 AM	725	798	1,523
9:00 AM - 10:00 AM	603	674	1,277
10:00 AM - 11:00 AM	585	752	1,337
11:00 AM - 12:00 PM	648	810	1458
Total	**4,523**	**4,739**	**9,262**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	703	904	1,607
1:00 PM - 2:00 PM	768	880	1,648
2:00 PM - 3:00 PM	1,043	1,057	2,100
3:00 PM - 4:00 PM	984	1,077	2,061
4:00 PM - 5:00 PM	866	1,068	1,934
5:00 PM - 6:00 PM	876	1,106	1,982
6:00 PM - 7:00 PM	655	916	1,571
7:00 PM - 8:00 PM	610	673	1,283
8:00 PM - 9:00 PM	466	581	1,047
9:00 PM - 10:00 PM	430	447	877
10:00 PM - 11:00 PM	335	334	669
11:00 PM - 12:00 AM	243	230	473
Total	**7,979**	**9,273**	**17,252**

24-Hour	*EB*	*Volume*	*12,502*	*24-Hour*	*WB*	*Volume*	*14,012*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 1. Massachusetts Ave between SR-94 Westbound Ramps and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

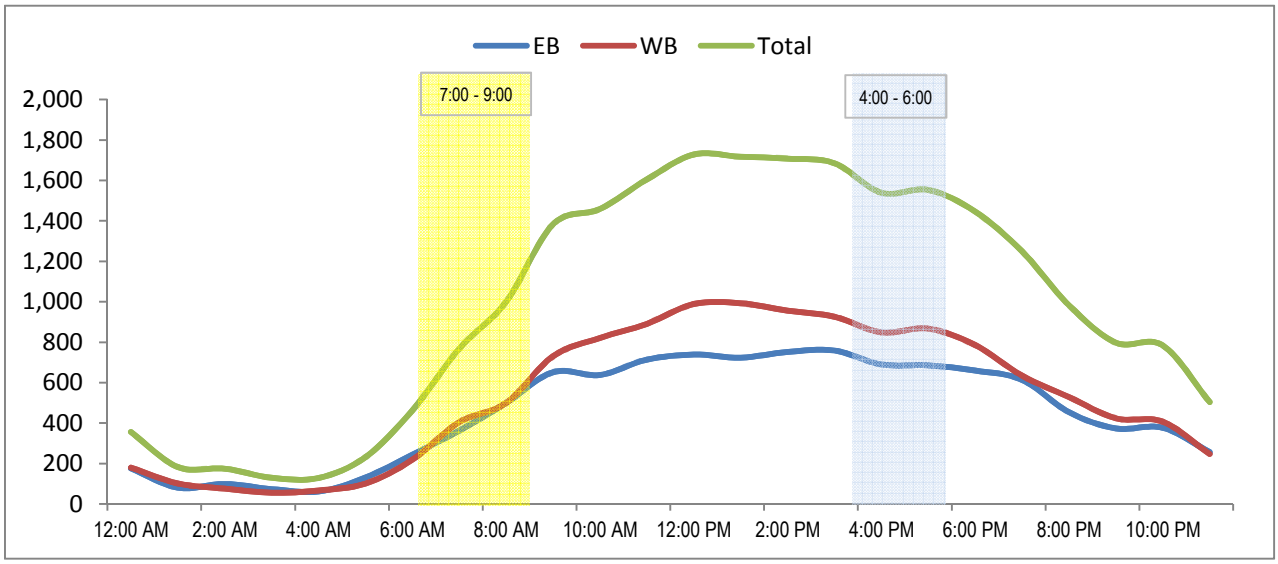
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*23,577*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	176	180	356
1:00 AM - 2:00 AM	81	102	183
2:00 AM - 3:00 AM	99	76	175
3:00 AM - 4:00 AM	74	56	130
4:00 AM - 5:00 AM	62	67	129
5:00 AM - 6:00 AM	131	101	232
6:00 AM - 7:00 AM	244	219	463
7:00 AM - 8:00 AM	363	405	768
8:00 AM - 9:00 AM	500	500	1,000
9:00 AM - 10:00 AM	652	731	1,383
10:00 AM - 11:00 AM	638	821	1,459
11:00 AM - 12:00 PM	714	891	1605
Total	**3,734**	**4,149**	**7,883**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	739	989	1,728
1:00 PM - 2:00 PM	724	993	1,717
2:00 PM - 3:00 PM	752	956	1,708
3:00 PM - 4:00 PM	759	926	1,685
4:00 PM - 5:00 PM	690	849	1,539
5:00 PM - 6:00 PM	686	867	1,553
6:00 PM - 7:00 PM	660	786	1,446
7:00 PM - 8:00 PM	614	635	1,249
8:00 PM - 9:00 PM	454	529	983
9:00 PM - 10:00 PM	374	424	798
10:00 PM - 11:00 PM	377	407	784
11:00 PM - 12:00 AM	257	247	504
Total	**7,086**	**8,608**	**15,694**

24-Hour	*EB*	*Volume*	*10,820*	*24-Hour*	*WB*	*Volume*	*12,757*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 1. Massachusetts Ave between SR-94 Westbound Ramps and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

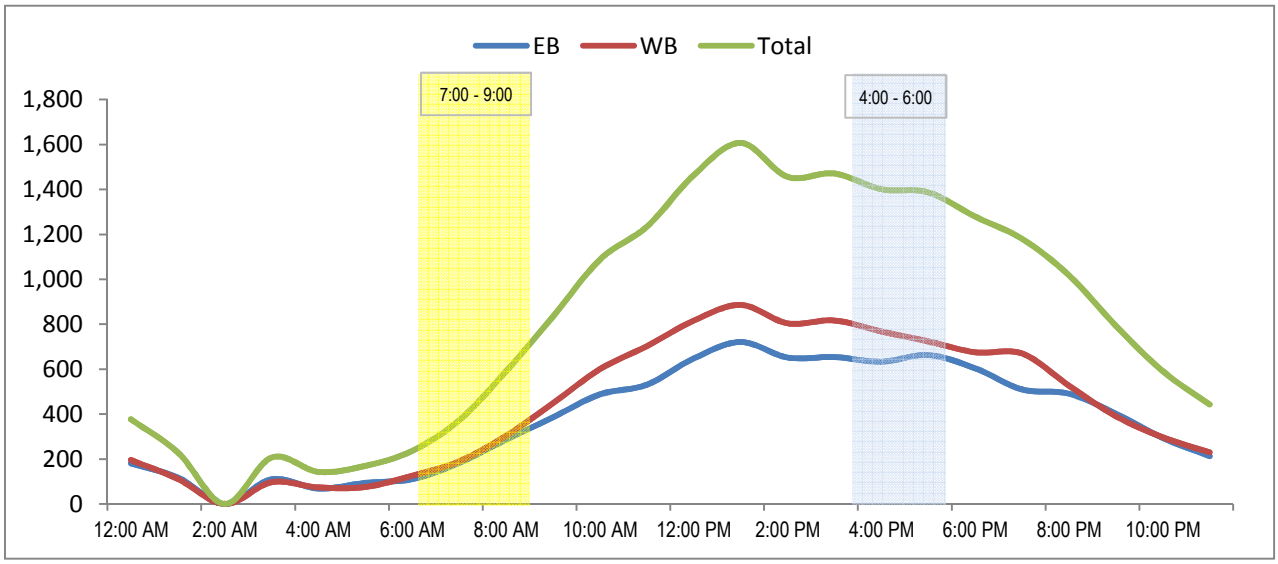
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,575*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	181	196	377
1:00 AM - 2:00 AM	118	112	230
2:00 AM - 3:00 AM	0	0	0
3:00 AM - 4:00 AM	110	97	207
4:00 AM - 5:00 AM	69	74	143
5:00 AM - 6:00 AM	94	76	170
6:00 AM - 7:00 AM	111	126	237
7:00 AM - 8:00 AM	183	190	373
8:00 AM - 9:00 AM	287	304	591
9:00 AM - 10:00 AM	386	449	835
10:00 AM - 11:00 AM	488	600	1,088
11:00 AM - 12:00 PM	531	703	1234
Total	**2,558**	**2,927**	**5,485**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	648	816	1,464
1:00 PM - 2:00 PM	721	886	1,607
2:00 PM - 3:00 PM	652	804	1,456
3:00 PM - 4:00 PM	654	817	1,471
4:00 PM - 5:00 PM	633	768	1,401
5:00 PM - 6:00 PM	663	724	1,387
6:00 PM - 7:00 PM	604	675	1,279
7:00 PM - 8:00 PM	510	670	1,180
8:00 PM - 9:00 PM	491	527	1,018
9:00 PM - 10:00 PM	402	391	793
10:00 PM - 11:00 PM	294	297	591
11:00 PM - 12:00 AM	213	230	443
Total	**6,485**	**7,605**	**14,090**

24-Hour	*EB*	*Volume*	*9,043*	*24-Hour*	*WB*	*Volume*	*10,532*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

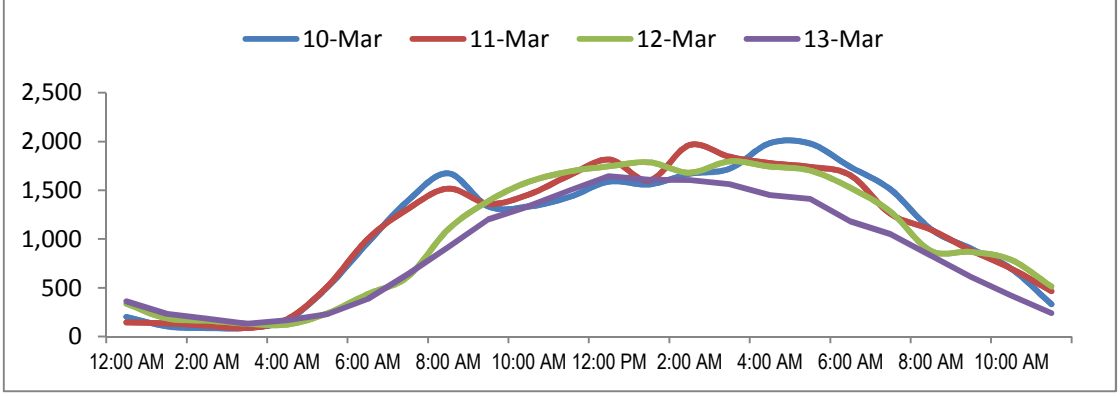
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 2. Massachusetts Ave between SR-94 Eastbound Ramps and Broadway
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***24,383***
Highest Daily Traffic	***26,260***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	202	144	336	362
1:00 AM - 2:00 AM	106	136	185	235
2:00 AM - 3:00 AM	87	112	163	185
3:00 AM - 4:00 AM	89	88	133	133
4:00 AM - 5:00 AM	169	179	123	169
5:00 AM - 6:00 AM	507	515	239	229
6:00 AM - 7:00 AM	961	1,000	436	385
7:00 AM - 8:00 AM	1,394	1,309	615	640
8:00 AM - 9:00 AM	1,674	1,517	1,098	916
9:00 AM - 10:00 AM	1,334	1,361	1,390	1,200
10:00 AM - 11:00 AM	1,333	1,455	1,586	1,337
11:00 AM - 12:00 PM	1,429	1,649	1,692	1,497
12:00 PM - 1:00 PM	1,588	1,815	1,745	1,643
1:00 PM - 2:00 PM	1,560	1,601	1,787	1,608
2:00 PM - 3:00 PM	1,670	1,963	1,681	1,605
3:00 PM - 4:00 PM	1,721	1,844	1,796	1,563
4:00 PM - 5:00 PM	1,983	1,779	1,743	1,451
5:00 PM - 6:00 PM	1,979	1,739	1,702	1,412
6:00 PM - 7:00 PM	1,740	1,654	1,525	1,181
7:00 PM - 8:00 PM	1,508	1,258	1,279	1,051
8:00 PM - 9:00 PM	1,103	1,096	879	831
9:00 PM - 10:00 PM	901	884	867	612
10:00 PM - 11:00 PM	696	697	787	421
11:00 PM - 12:00 AM	332	465	513	239
Total	**26,066**	**26,260**	**24,300**	**20,905**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 2. Massachusetts Ave between SR-94 Eastbound Ramps and Broadway

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

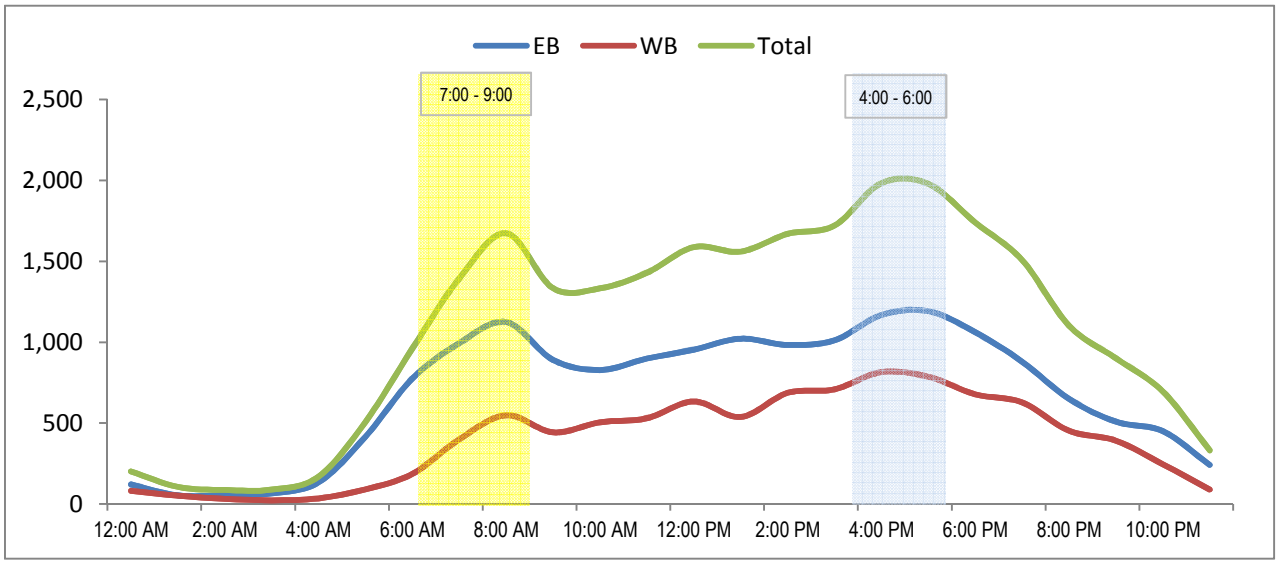
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*26,066*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	121	81	202
1:00 AM - 2:00 AM	54	52	106
2:00 AM - 3:00 AM	55	32	87
3:00 AM - 4:00 AM	66	23	89
4:00 AM - 5:00 AM	134	35	169
5:00 AM - 6:00 AM	416	91	507
6:00 AM - 7:00 AM	775	186	961
7:00 AM - 8:00 AM	994	400	1,394
8:00 AM - 9:00 AM	1,125	549	1,674
9:00 AM - 10:00 AM	891	443	1,334
10:00 AM - 11:00 AM	828	505	1,333
11:00 AM - 12:00 PM	899	530	1429
Total	**6,358**	**2,927**	**9,285**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	954	634	1,588
1:00 PM - 2:00 PM	1,022	538	1,560
2:00 PM - 3:00 PM	983	687	1,670
3:00 PM - 4:00 PM	1,012	709	1,721
4:00 PM - 5:00 PM	1,168	815	1,983
5:00 PM - 6:00 PM	1,192	787	1,979
6:00 PM - 7:00 PM	1,062	678	1,740
7:00 PM - 8:00 PM	880	628	1,508
8:00 PM - 9:00 PM	650	453	1,103
9:00 PM - 10:00 PM	509	392	901
10:00 PM - 11:00 PM	450	246	696
11:00 PM - 12:00 AM	242	90	332
Total	**10,124**	**6,657**	**16,781**

24-Hour	*EB*	*Volume*	*16,482*	*24-Hour*	*WB*	*Volume*	*9,584*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 2. Massachusetts Ave between SR-94 Eastbound Ramps and Broadway

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

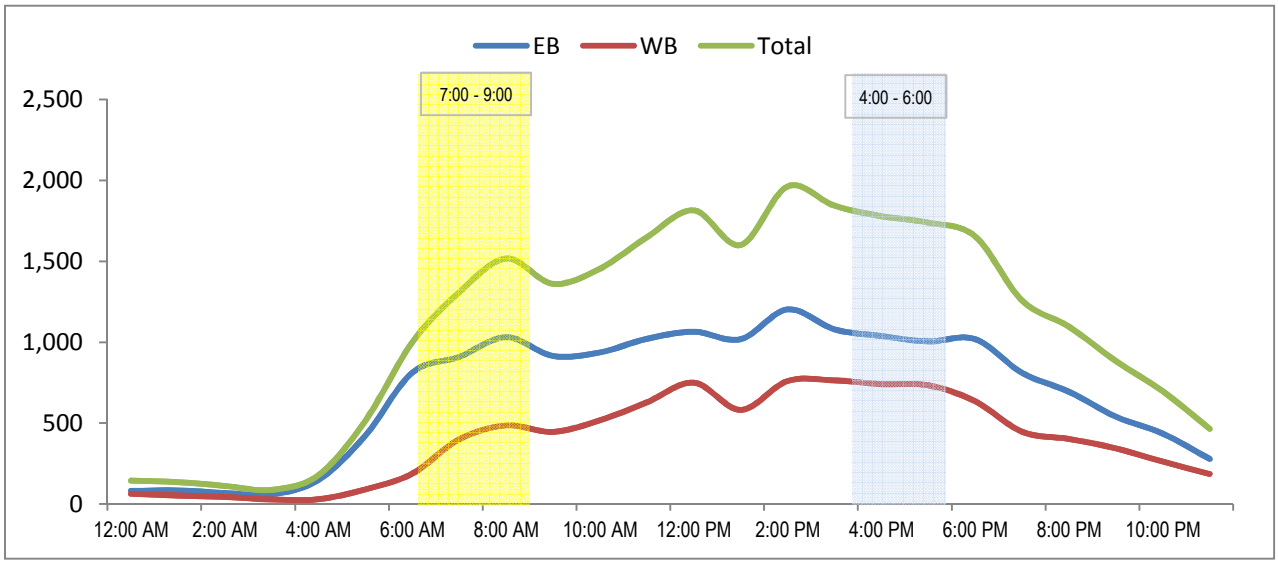
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*26,260*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	81	63	144
1:00 AM - 2:00 AM	84	52	136
2:00 AM - 3:00 AM	68	44	112
3:00 AM - 4:00 AM	60	28	88
4:00 AM - 5:00 AM	149	30	179
5:00 AM - 6:00 AM	424	91	515
6:00 AM - 7:00 AM	812	188	1,000
7:00 AM - 8:00 AM	909	400	1,309
8:00 AM - 9:00 AM	1,031	486	1,517
9:00 AM - 10:00 AM	915	446	1,361
10:00 AM - 11:00 AM	937	518	1,455
11:00 AM - 12:00 PM	1,021	628	1649
Total	**6,491**	**2,974**	**9,465**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,065	750	1,815
1:00 PM - 2:00 PM	1,019	582	1,601
2:00 PM - 3:00 PM	1,203	760	1,963
3:00 PM - 4:00 PM	1,080	764	1,844
4:00 PM - 5:00 PM	1,038	741	1,779
5:00 PM - 6:00 PM	1,005	734	1,739
6:00 PM - 7:00 PM	1,019	635	1,654
7:00 PM - 8:00 PM	811	447	1,258
8:00 PM - 9:00 PM	694	402	1,096
9:00 PM - 10:00 PM	540	344	884
10:00 PM - 11:00 PM	435	262	697
11:00 PM - 12:00 AM	279	186	465
Total	**10,188**	**6,607**	**16,795**

24-Hour	*EB*	*Volume*	*16,679*	*24-Hour*	*WB*	*Volume*	*9,581*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 2. Massachusetts Ave between SR-94 Eastbound Ramps and Broadway

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

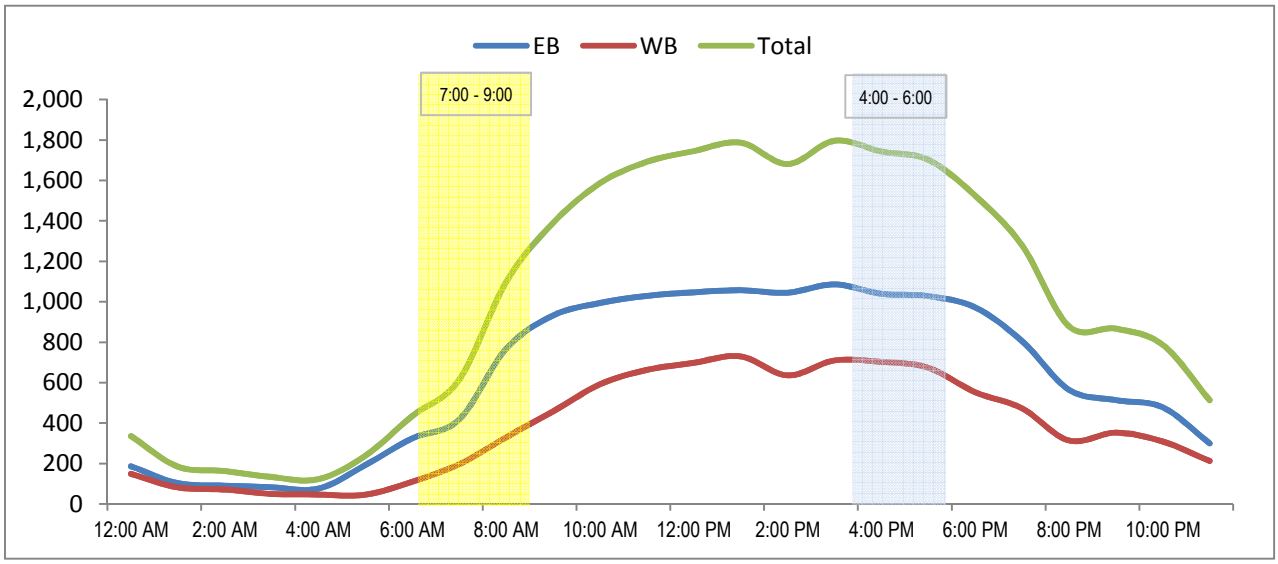
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*24,300*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	187	149	336
1:00 AM - 2:00 AM	103	82	185
2:00 AM - 3:00 AM	91	72	163
3:00 AM - 4:00 AM	83	50	133
4:00 AM - 5:00 AM	76	47	123
5:00 AM - 6:00 AM	193	46	239
6:00 AM - 7:00 AM	325	111	436
7:00 AM - 8:00 AM	418	197	615
8:00 AM - 9:00 AM	768	330	1,098
9:00 AM - 10:00 AM	932	458	1,390
10:00 AM - 11:00 AM	994	592	1,586
11:00 AM - 12:00 PM	1,029	663	1692
Total	**5,199**	**2,797**	**7,996**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,047	698	1,745
1:00 PM - 2:00 PM	1,057	730	1,787
2:00 PM - 3:00 PM	1,045	636	1,681
3:00 PM - 4:00 PM	1,086	710	1,796
4:00 PM - 5:00 PM	1,040	703	1,743
5:00 PM - 6:00 PM	1,028	674	1,702
6:00 PM - 7:00 PM	972	553	1,525
7:00 PM - 8:00 PM	806	473	1,279
8:00 PM - 9:00 PM	565	314	879
9:00 PM - 10:00 PM	514	353	867
10:00 PM - 11:00 PM	478	309	787
11:00 PM - 12:00 AM	300	213	513
Total	**9,938**	**6,366**	**16,304**

24-Hour	*EB*	*Volume*	*15,137*	*24-Hour*	*WB*	*Volume*	*9,163*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 2. Massachusetts Ave between SR-94 Eastbound Ramps and Broadway

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

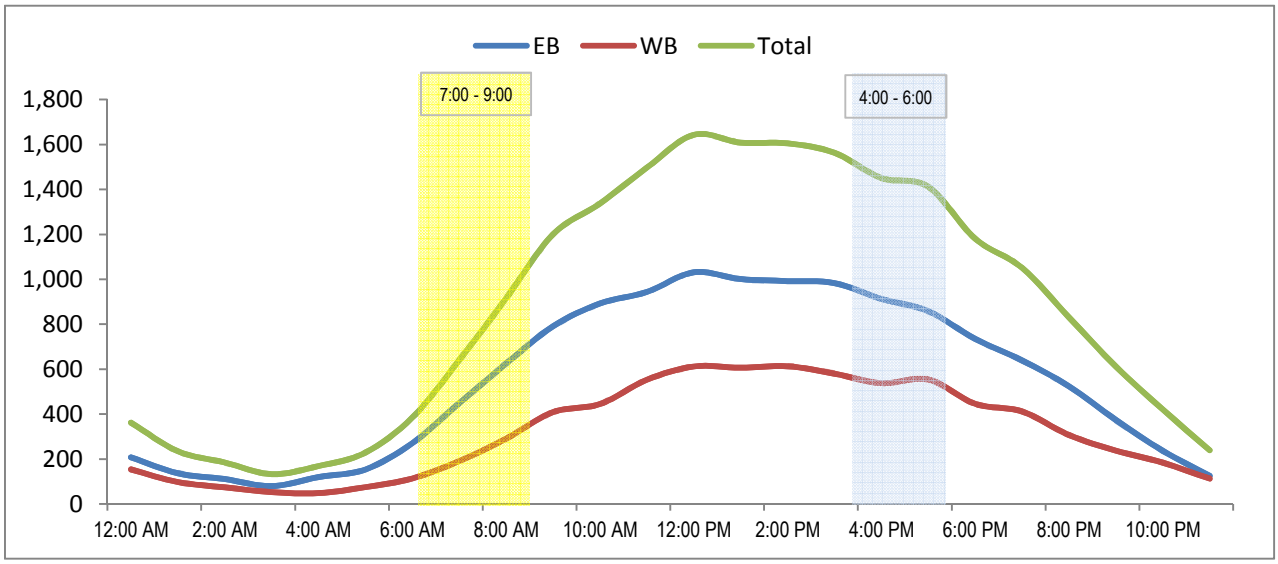
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*20,905*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	208	154	362
1:00 AM - 2:00 AM	137	98	235
2:00 AM - 3:00 AM	111	74	185
3:00 AM - 4:00 AM	80	53	133
4:00 AM - 5:00 AM	120	49	169
5:00 AM - 6:00 AM	154	75	229
6:00 AM - 7:00 AM	271	114	385
7:00 AM - 8:00 AM	449	191	640
8:00 AM - 9:00 AM	625	291	916
9:00 AM - 10:00 AM	791	409	1,200
10:00 AM - 11:00 AM	892	445	1,337
11:00 AM - 12:00 PM	944	553	1497
Total	**4,782**	**2,506**	**7,288**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,031	612	1,643
1:00 PM - 2:00 PM	1,001	607	1,608
2:00 PM - 3:00 PM	992	613	1,605
3:00 PM - 4:00 PM	983	580	1,563
4:00 PM - 5:00 PM	913	538	1,451
5:00 PM - 6:00 PM	858	554	1,412
6:00 PM - 7:00 PM	735	446	1,181
7:00 PM - 8:00 PM	639	412	1,051
8:00 PM - 9:00 PM	524	307	831
9:00 PM - 10:00 PM	374	238	612
10:00 PM - 11:00 PM	237	184	421
11:00 PM - 12:00 AM	126	113	239
Total	**8,413**	**5,204**	**13,617**

24-Hour	*EB*	*Volume*	*13,195*	*24-Hour*	*WB*	*Volume*	*7,710*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

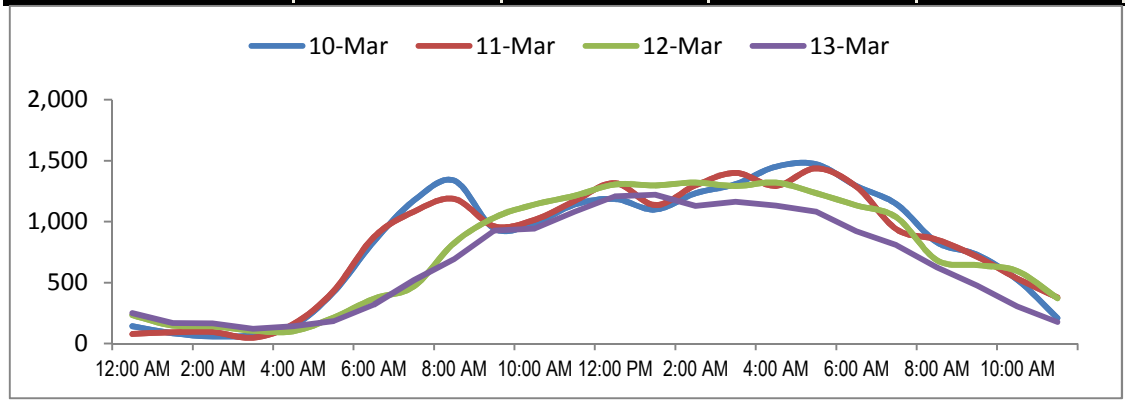
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location:	3. Massachusetts Ave between Pacific Ave and Westview Pl
Orientation:	*North-South*
Day 1	*Thursday, March 10, 2016*
Day 2	*Friday, March 11, 2016*
Day 3	*Saturday, March 12, 2016*
Day 4	*Sunday, March 13, 2016*
AVC Proj. No:	*16-0493*

Average Daily Traffic	***18,392***
Highest Daily Traffic	***19,814***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	143	78	232	251
1:00 AM - 2:00 AM	85	93	148	169
2:00 AM - 3:00 AM	58	94	141	166
3:00 AM - 4:00 AM	70	48	105	120
4:00 AM - 5:00 AM	143	160	101	142
5:00 AM - 6:00 AM	420	430	213	183
6:00 AM - 7:00 AM	835	873	368	319
7:00 AM - 8:00 AM	1,173	1,082	469	520
8:00 AM - 9:00 AM	1,337	1,186	825	693
9:00 AM - 10:00 AM	943	962	1,033	928
10:00 AM - 11:00 AM	989	1,015	1,141	944
11:00 AM - 12:00 PM	1,140	1,171	1,213	1,082
12:00 PM - 1:00 PM	1,186	1,316	1,305	1,209
1:00 PM - 2:00 PM	1,099	1,136	1,298	1,221
2:00 PM - 3:00 PM	1,233	1,297	1,320	1,129
3:00 PM - 4:00 PM	1,308	1,400	1,292	1,163
4:00 PM - 5:00 PM	1,451	1,293	1,320	1,132
5:00 PM - 6:00 PM	1,471	1,437	1,234	1,081
6:00 PM - 7:00 PM	1,293	1,287	1,133	921
7:00 PM - 8:00 PM	1,143	937	1,035	805
8:00 PM - 9:00 PM	832	853	684	626
9:00 PM - 10:00 PM	729	713	644	475
10:00 PM - 11:00 PM	524	534	595	305
11:00 PM - 12:00 AM	209	378	372	177
Total	**19,814**	**19,773**	**18,221**	**15,761**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 3. Massachusetts Ave between Pacific Ave and Westview Pl

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

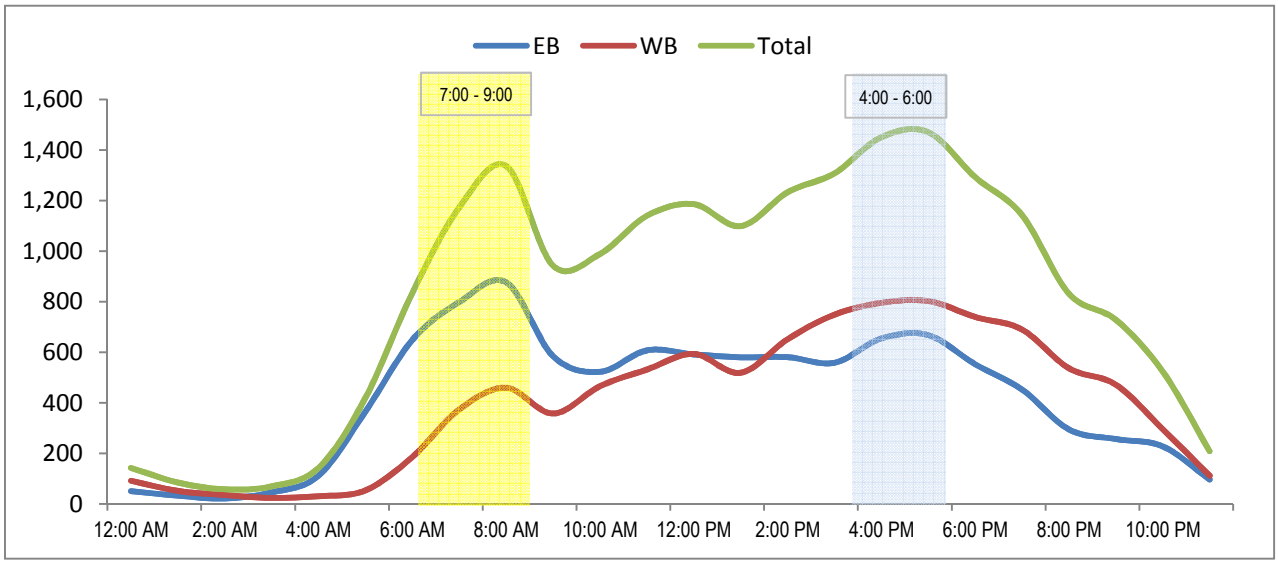
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,814*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	51	92	143
1:00 AM - 2:00 AM	33	52	85
2:00 AM - 3:00 AM	22	36	58
3:00 AM - 4:00 AM	46	24	70
4:00 AM - 5:00 AM	112	31	143
5:00 AM - 6:00 AM	366	54	420
6:00 AM - 7:00 AM	649	186	835
7:00 AM - 8:00 AM	799	374	1,173
8:00 AM - 9:00 AM	877	460	1,337
9:00 AM - 10:00 AM	585	358	943
10:00 AM - 11:00 AM	523	466	989
11:00 AM - 12:00 PM	608	532	1140
Total	**4,671**	**2,665**	**7,336**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	592	594	1,186
1:00 PM - 2:00 PM	580	519	1,099
2:00 PM - 3:00 PM	581	652	1,233
3:00 PM - 4:00 PM	559	749	1,308
4:00 PM - 5:00 PM	655	796	1,451
5:00 PM - 6:00 PM	668	803	1,471
6:00 PM - 7:00 PM	553	740	1,293
7:00 PM - 8:00 PM	453	690	1,143
8:00 PM - 9:00 PM	295	537	832
9:00 PM - 10:00 PM	257	472	729
10:00 PM - 11:00 PM	228	296	524
11:00 PM - 12:00 AM	97	112	209
Total	**5,518**	**6,960**	**12,478**

24-Hour	*EB*	*Volume*	*10,189*	*24-Hour*	*WB*	*Volume*	*9,625*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 3. Massachusetts Ave between Pacific Ave and Westview Pl

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

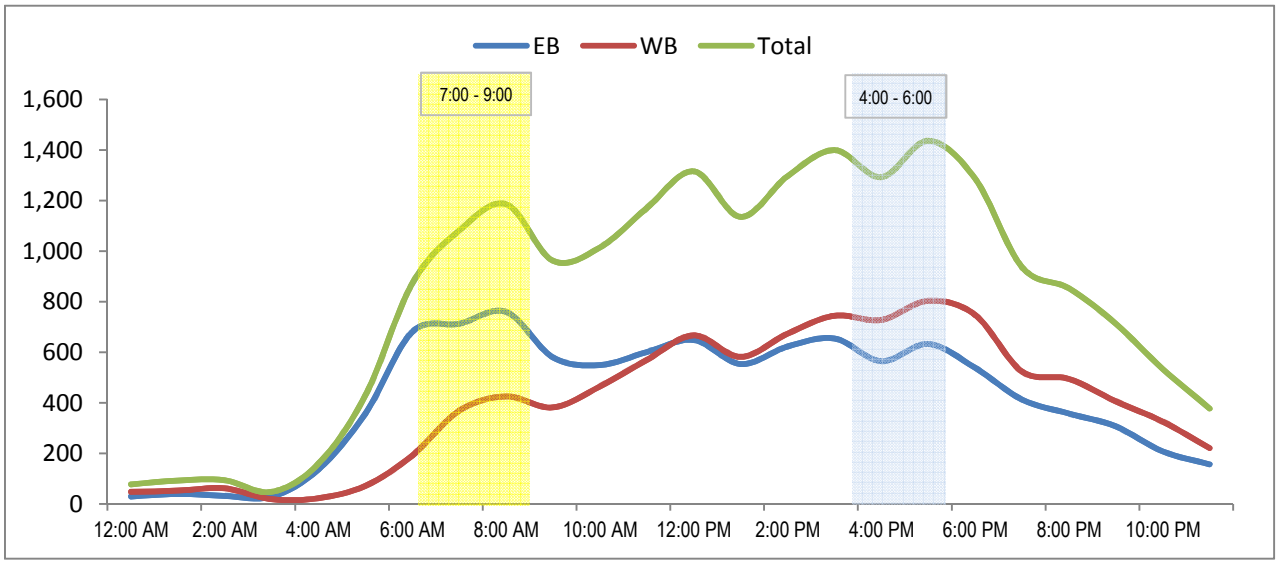
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,773*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	30	48	78
1:00 AM - 2:00 AM	40	53	93
2:00 AM - 3:00 AM	32	62	94
3:00 AM - 4:00 AM	29	19	48
4:00 AM - 5:00 AM	137	23	160
5:00 AM - 6:00 AM	358	72	430
6:00 AM - 7:00 AM	681	192	873
7:00 AM - 8:00 AM	713	369	1,082
8:00 AM - 9:00 AM	760	426	1,186
9:00 AM - 10:00 AM	580	382	962
10:00 AM - 11:00 AM	550	465	1,015
11:00 AM - 12:00 PM	601	570	1171
Total	**4,511**	**2,681**	**7,192**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	649	667	1,316
1:00 PM - 2:00 PM	554	582	1,136
2:00 PM - 3:00 PM	623	674	1,297
3:00 PM - 4:00 PM	655	745	1,400
4:00 PM - 5:00 PM	565	728	1,293
5:00 PM - 6:00 PM	633	804	1,437
6:00 PM - 7:00 PM	539	748	1,287
7:00 PM - 8:00 PM	413	524	937
8:00 PM - 9:00 PM	358	495	853
9:00 PM - 10:00 PM	307	406	713
10:00 PM - 11:00 PM	208	326	534
11:00 PM - 12:00 AM	157	221	378
Total	**5,661**	**6,920**	**12,581**

24-Hour	*EB*	*Volume*	*10,172*	*24-Hour*	*WB*	*Volume*	*9,601*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 3. Massachusetts Ave between Pacific Ave and Westview Pl

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

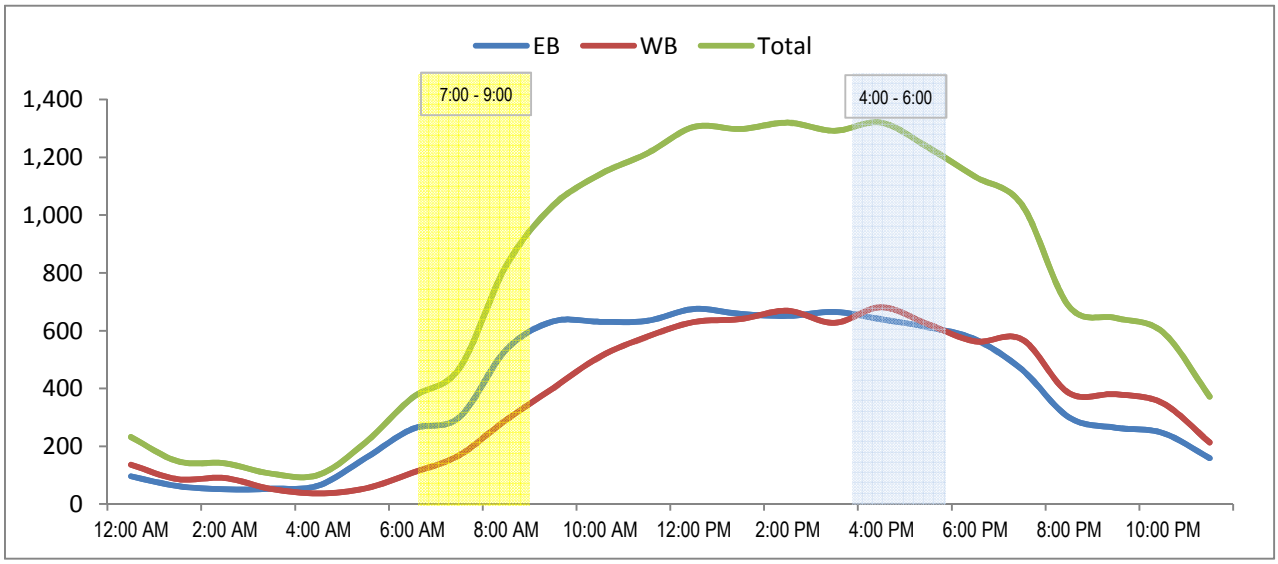
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,221*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	96	136	232
1:00 AM - 2:00 AM	62	86	148
2:00 AM - 3:00 AM	51	90	141
3:00 AM - 4:00 AM	53	52	105
4:00 AM - 5:00 AM	64	37	101
5:00 AM - 6:00 AM	159	54	213
6:00 AM - 7:00 AM	260	108	368
7:00 AM - 8:00 AM	300	169	469
8:00 AM - 9:00 AM	534	291	825
9:00 AM - 10:00 AM	632	401	1,033
10:00 AM - 11:00 AM	631	510	1,141
11:00 AM - 12:00 PM	634	579	1213
Total	**3,476**	**2,513**	**5,989**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	675	630	1,305
1:00 PM - 2:00 PM	658	640	1,298
2:00 PM - 3:00 PM	651	669	1,320
3:00 PM - 4:00 PM	665	627	1,292
4:00 PM - 5:00 PM	639	681	1,320
5:00 PM - 6:00 PM	612	622	1,234
6:00 PM - 7:00 PM	570	563	1,133
7:00 PM - 8:00 PM	465	570	1,035
8:00 PM - 9:00 PM	300	384	684
9:00 PM - 10:00 PM	264	380	644
10:00 PM - 11:00 PM	246	349	595
11:00 PM - 12:00 AM	159	213	372
Total	**5,904**	**6,328**	**12,232**

24-Hour	*EB*	*Volume*	*9,380*	*24-Hour*	*WB*	*Volume*	*8,841*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 3. Massachusetts Ave between Pacific Ave and Westview Pl

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

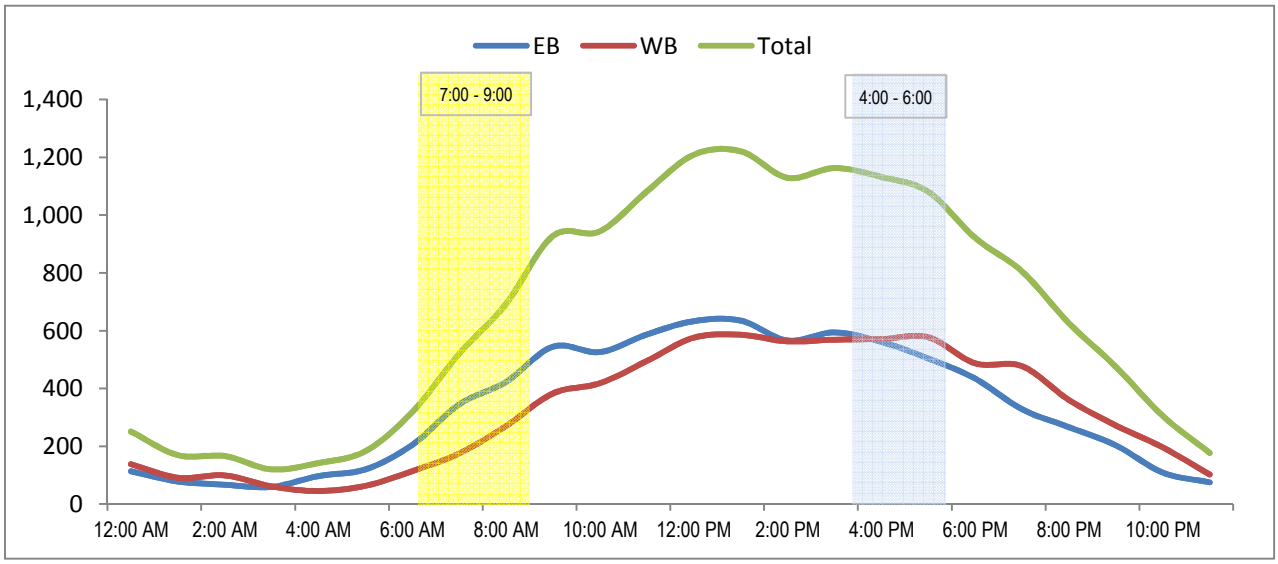
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*15,761*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	113	138	251
1:00 AM - 2:00 AM	78	91	169
2:00 AM - 3:00 AM	67	99	166
3:00 AM - 4:00 AM	59	61	120
4:00 AM - 5:00 AM	97	45	142
5:00 AM - 6:00 AM	120	63	183
6:00 AM - 7:00 AM	205	114	319
7:00 AM - 8:00 AM	345	175	520
8:00 AM - 9:00 AM	423	270	693
9:00 AM - 10:00 AM	545	383	928
10:00 AM - 11:00 AM	526	418	944
11:00 AM - 12:00 PM	587	495	1082
Total	**3,165**	**2,352**	**5,517**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	633	576	1,209
1:00 PM - 2:00 PM	635	586	1,221
2:00 PM - 3:00 PM	566	563	1,129
3:00 PM - 4:00 PM	594	569	1,163
4:00 PM - 5:00 PM	561	571	1,132
5:00 PM - 6:00 PM	504	577	1,081
6:00 PM - 7:00 PM	434	487	921
7:00 PM - 8:00 PM	328	477	805
8:00 PM - 9:00 PM	266	360	626
9:00 PM - 10:00 PM	203	272	475
10:00 PM - 11:00 PM	109	196	305
11:00 PM - 12:00 AM	75	102	177
Total	**4,908**	**5,336**	**10,244**

24-Hour	*EB*	*Volume*	*8,073*	*24-Hour*	*WB*	*Volume*	*7,688*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

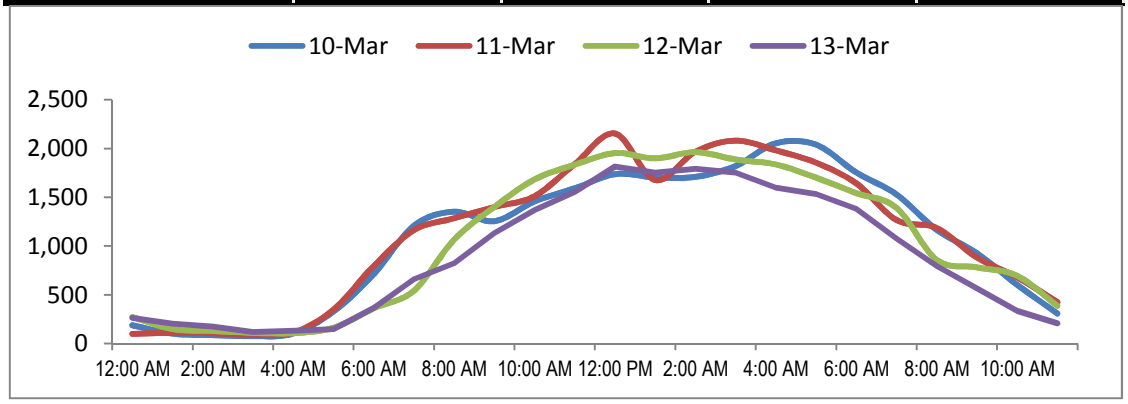
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 4. Broadway, west of Massachusetts Ave
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***24,681***
Highest Daily Traffic	***26,655***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	187	99	272	262
1:00 AM - 2:00 AM	102	110	149	203
2:00 AM - 3:00 AM	87	107	129	174
3:00 AM - 4:00 AM	75	91	110	119
4:00 AM - 5:00 AM	103	113	107	133
5:00 AM - 6:00 AM	329	348	162	148
6:00 AM - 7:00 AM	713	795	361	365
7:00 AM - 8:00 AM	1,208	1,163	542	660
8:00 AM - 9:00 AM	1,352	1,285	1,066	825
9:00 AM - 10:00 AM	1,255	1,400	1,402	1,134
10:00 AM - 11:00 AM	1,457	1,511	1,683	1,369
11:00 AM - 12:00 PM	1,592	1,841	1,834	1,556
12:00 PM - 1:00 PM	1,737	2,153	1,953	1,816
1:00 PM - 2:00 PM	1,704	1,677	1,899	1,754
2:00 PM - 3:00 PM	1,709	1,968	1,963	1,792
3:00 PM - 4:00 PM	1,821	2,081	1,887	1,751
4:00 PM - 5:00 PM	2,054	1,980	1,836	1,597
5:00 PM - 6:00 PM	2,039	1,854	1,701	1,532
6:00 PM - 7:00 PM	1,753	1,642	1,542	1,383
7:00 PM - 8:00 PM	1,529	1,267	1,391	1,078
8:00 PM - 9:00 PM	1,166	1,185	858	793
9:00 PM - 10:00 PM	926	882	781	565
10:00 PM - 11:00 PM	602	678	694	334
11:00 PM - 12:00 AM	308	425	387	208
Total	**25,808**	**26,655**	**24,709**	**21,551**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 4. Broadway, west of Massachusetts Ave

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

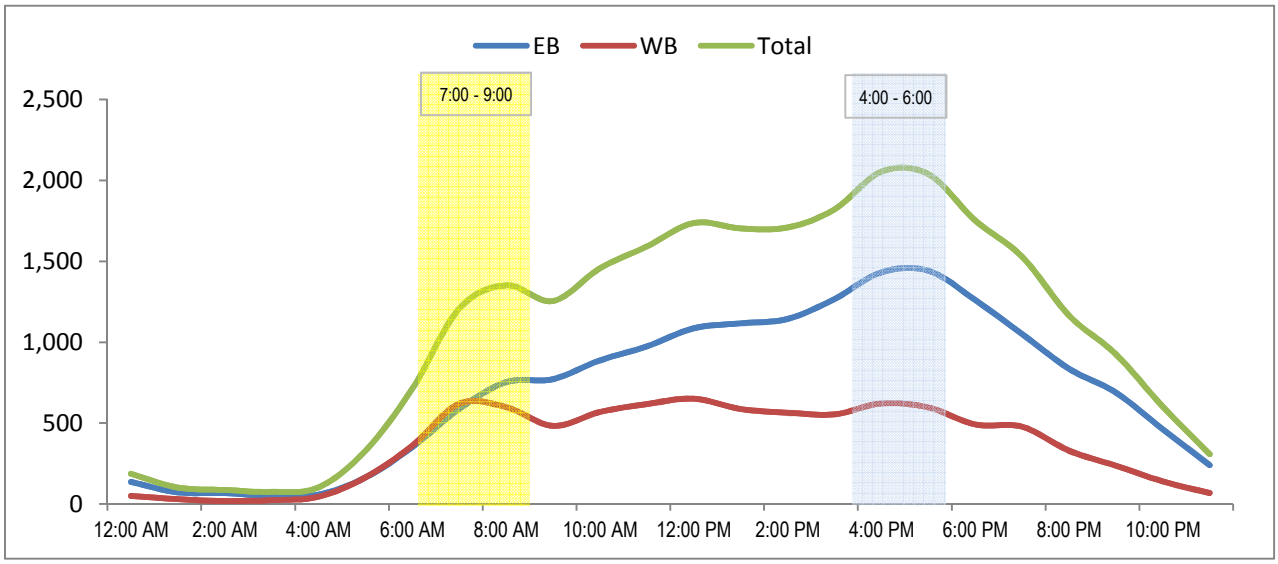
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*25,808*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	137	50	187
1:00 AM - 2:00 AM	72	30	102
2:00 AM - 3:00 AM	68	19	87
3:00 AM - 4:00 AM	51	24	75
4:00 AM - 5:00 AM	58	45	103
5:00 AM - 6:00 AM	164	165	329
6:00 AM - 7:00 AM	352	361	713
7:00 AM - 8:00 AM	588	620	1,208
8:00 AM - 9:00 AM	753	599	1,352
9:00 AM - 10:00 AM	772	483	1,255
10:00 AM - 11:00 AM	888	569	1,457
11:00 AM - 12:00 PM	974	618	1592
Total	**4,877**	**3,583**	**8,460**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,086	651	1,737
1:00 PM - 2:00 PM	1,117	587	1,704
2:00 PM - 3:00 PM	1,144	565	1,709
3:00 PM - 4:00 PM	1,267	554	1,821
4:00 PM - 5:00 PM	1,432	622	2,054
5:00 PM - 6:00 PM	1,442	597	2,039
6:00 PM - 7:00 PM	1,261	492	1,753
7:00 PM - 8:00 PM	1,051	478	1,529
8:00 PM - 9:00 PM	836	330	1,166
9:00 PM - 10:00 PM	689	237	926
10:00 PM - 11:00 PM	462	140	602
11:00 PM - 12:00 AM	240	68	308
Total	**12,027**	**5,321**	**17,348**

24-Hour	*EB*	*Volume*	*16,904*	*24-Hour*	*WB*	*Volume*	*8,904*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 4. Broadway, west of Massachusetts Ave

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

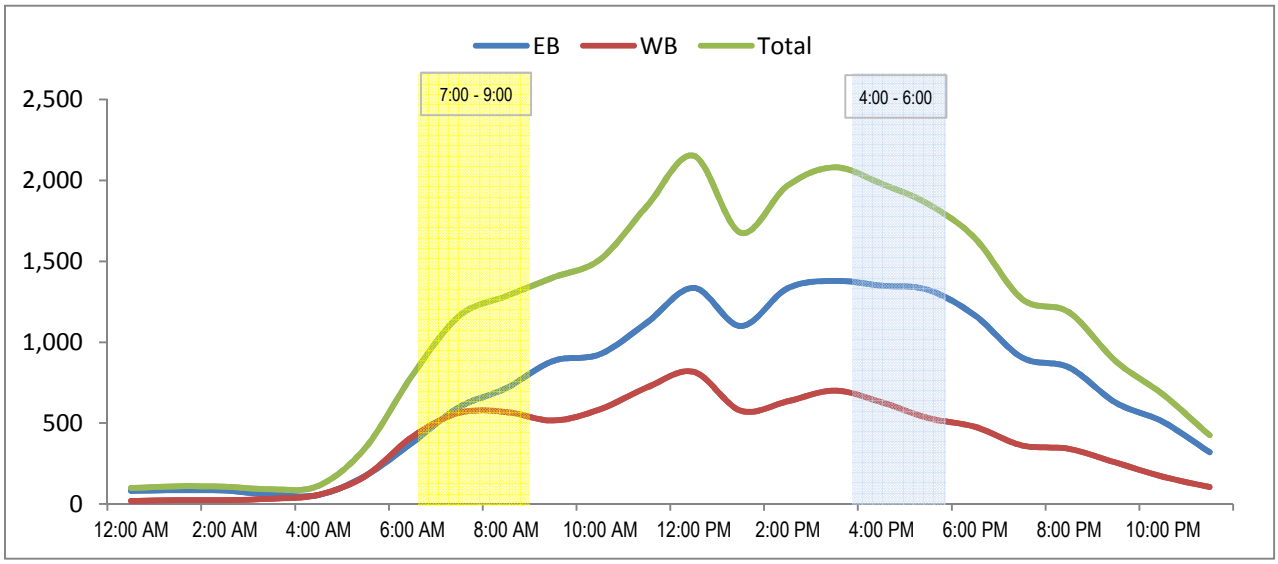
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*26,655*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	81	18	99
1:00 AM - 2:00 AM	86	24	110
2:00 AM - 3:00 AM	83	24	107
3:00 AM - 4:00 AM	58	33	91
4:00 AM - 5:00 AM	56	57	113
5:00 AM - 6:00 AM	175	173	348
6:00 AM - 7:00 AM	379	416	795
7:00 AM - 8:00 AM	599	564	1,163
8:00 AM - 9:00 AM	716	569	1,285
9:00 AM - 10:00 AM	884	516	1,400
10:00 AM - 11:00 AM	926	585	1,511
11:00 AM - 12:00 PM	1,121	720	1841
Total	**5,164**	**3,699**	**8,863**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,336	817	2,153
1:00 PM - 2:00 PM	1,100	577	1,677
2:00 PM - 3:00 PM	1,333	635	1,968
3:00 PM - 4:00 PM	1,380	701	2,081
4:00 PM - 5:00 PM	1,350	630	1,980
5:00 PM - 6:00 PM	1,323	531	1,854
6:00 PM - 7:00 PM	1,165	477	1,642
7:00 PM - 8:00 PM	905	362	1,267
8:00 PM - 9:00 PM	844	341	1,185
9:00 PM - 10:00 PM	626	256	882
10:00 PM - 11:00 PM	509	169	678
11:00 PM - 12:00 AM	320	105	425
Total	**12,191**	**5,601**	**17,792**

24-Hour	*EB*	*Volume*	*17,355*	*24-Hour*	*WB*	*Volume*	*9,300*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 4. Broadway, west of Massachusetts Ave

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

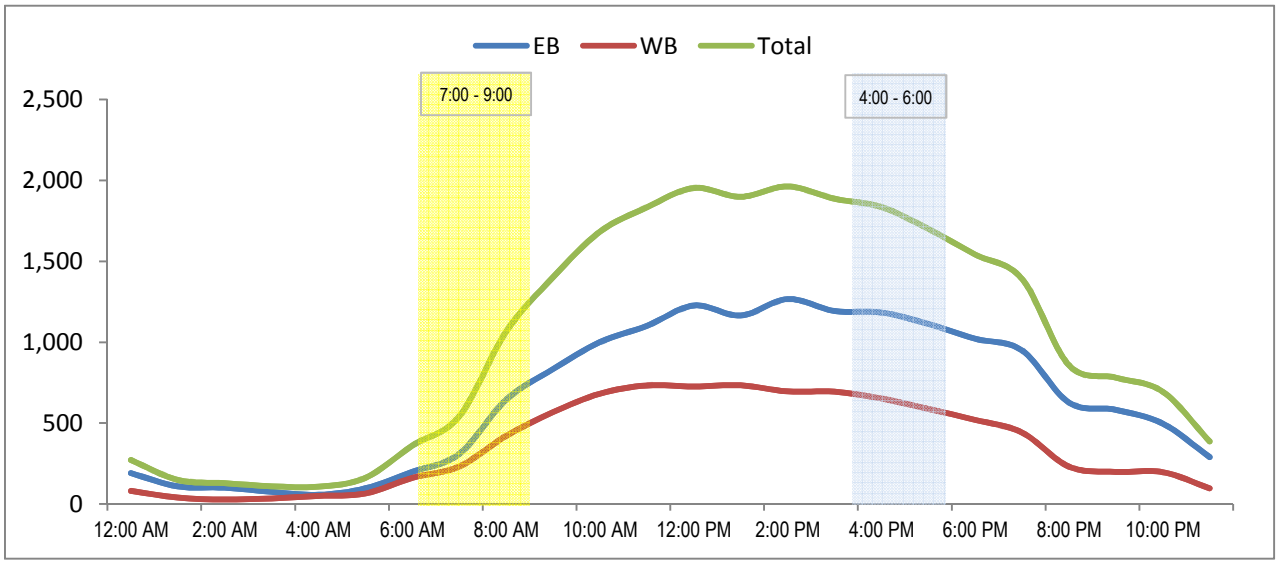
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*24,709*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	191	81	272
1:00 AM - 2:00 AM	109	40	149
2:00 AM - 3:00 AM	101	28	129
3:00 AM - 4:00 AM	75	35	110
4:00 AM - 5:00 AM	57	50	107
5:00 AM - 6:00 AM	97	65	162
6:00 AM - 7:00 AM	199	162	361
7:00 AM - 8:00 AM	310	232	542
8:00 AM - 9:00 AM	645	421	1,066
9:00 AM - 10:00 AM	834	568	1,402
10:00 AM - 11:00 AM	1,001	682	1,683
11:00 AM - 12:00 PM	1,101	733	1834
Total	**4,720**	**3,097**	**7,817**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,227	726	1,953
1:00 PM - 2:00 PM	1,165	734	1,899
2:00 PM - 3:00 PM	1,267	696	1,963
3:00 PM - 4:00 PM	1,193	694	1,887
4:00 PM - 5:00 PM	1,184	652	1,836
5:00 PM - 6:00 PM	1,113	588	1,701
6:00 PM - 7:00 PM	1,022	520	1,542
7:00 PM - 8:00 PM	949	442	1,391
8:00 PM - 9:00 PM	627	231	858
9:00 PM - 10:00 PM	582	199	781
10:00 PM - 11:00 PM	497	197	694
11:00 PM - 12:00 AM	290	97	387
Total	**11,116**	**5,776**	**16,892**

24-Hour	*EB*	*Volume*	*15,836*	*24-Hour*	*WB*	*Volume*	*8,873*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 4. Broadway, west of Massachusetts Ave

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

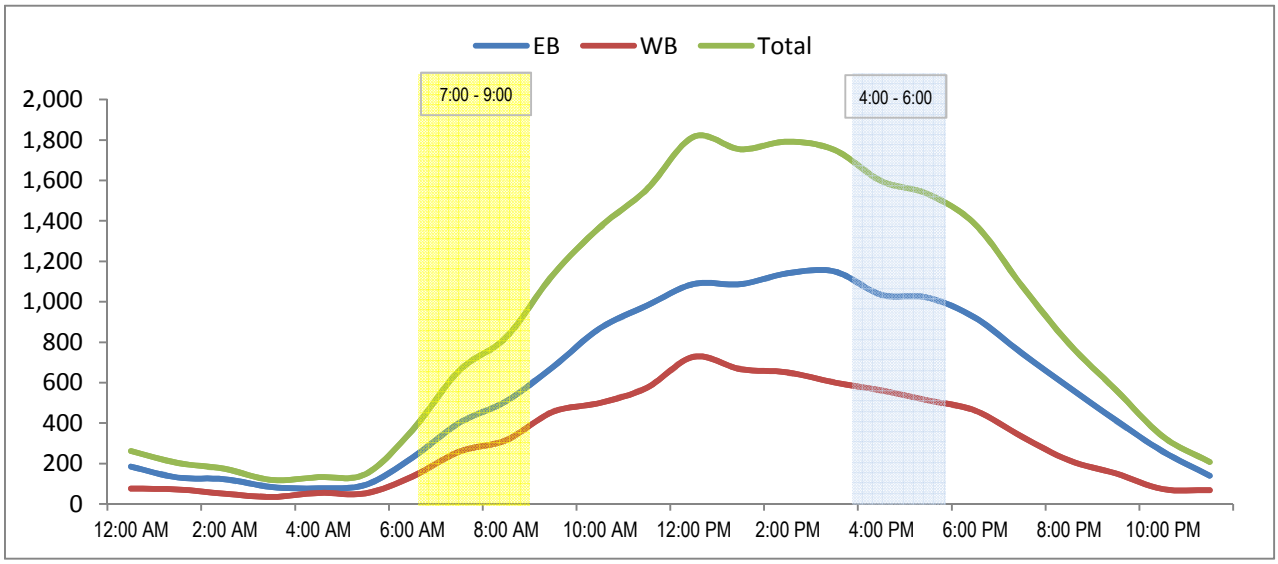
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*21,551*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	185	77	262
1:00 AM - 2:00 AM	131	72	203
2:00 AM - 3:00 AM	123	51	174
3:00 AM - 4:00 AM	84	35	119
4:00 AM - 5:00 AM	78	55	133
5:00 AM - 6:00 AM	95	53	148
6:00 AM - 7:00 AM	229	136	365
7:00 AM - 8:00 AM	401	259	660
8:00 AM - 9:00 AM	509	316	825
9:00 AM - 10:00 AM	678	456	1,134
10:00 AM - 11:00 AM	869	500	1,369
11:00 AM - 12:00 PM	981	575	1556
Total	**4,363**	**2,585**	**6,948**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,088	728	1,816
1:00 PM - 2:00 PM	1,087	667	1,754
2:00 PM - 3:00 PM	1,141	651	1,792
3:00 PM - 4:00 PM	1,150	601	1,751
4:00 PM - 5:00 PM	1,035	562	1,597
5:00 PM - 6:00 PM	1,020	512	1,532
6:00 PM - 7:00 PM	921	462	1,383
7:00 PM - 8:00 PM	745	333	1,078
8:00 PM - 9:00 PM	577	216	793
9:00 PM - 10:00 PM	414	151	565
10:00 PM - 11:00 PM	260	74	334
11:00 PM - 12:00 AM	140	68	208
Total	**9,578**	**5,025**	**14,603**

24-Hour	*EB*	*Volume*	*13,941*	*24-Hour*	*WB*	*Volume*	*7,610*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

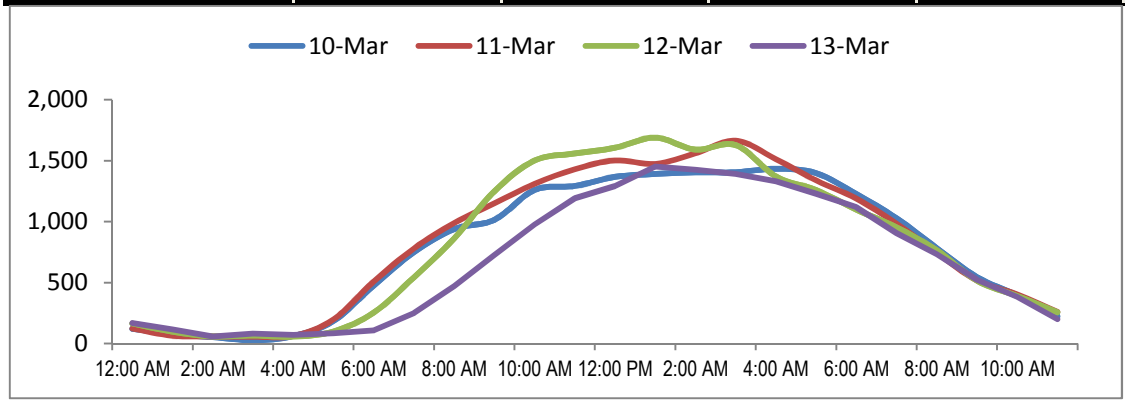
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 5. Broadway between Citrus St and Alford StEastbound Ramps
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***18,663***
Highest Daily Traffic	***19,877***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	121	123	164	168
1:00 AM - 2:00 AM	75	64	97	115
2:00 AM - 3:00 AM	53	58	58	59
3:00 AM - 4:00 AM	28	56	66	82
4:00 AM - 5:00 AM	62	62	57	71
5:00 AM - 6:00 AM	185	198	99	84
6:00 AM - 7:00 AM	476	509	254	108
7:00 AM - 8:00 AM	749	780	543	249
8:00 AM - 9:00 AM	939	989	862	471
9:00 AM - 10:00 AM	1,015	1,150	1,249	725
10:00 AM - 11:00 AM	1,260	1,310	1,501	976
11:00 AM - 12:00 PM	1,293	1,430	1,559	1,193
12:00 PM - 1:00 PM	1,367	1,502	1,606	1,292
1:00 PM - 2:00 PM	1,391	1,474	1,689	1,452
2:00 PM - 3:00 PM	1,404	1,561	1,591	1,425
3:00 PM - 4:00 PM	1,405	1,664	1,628	1,391
4:00 PM - 5:00 PM	1,434	1,513	1,371	1,332
5:00 PM - 6:00 PM	1,398	1,338	1,258	1,230
6:00 PM - 7:00 PM	1,226	1,189	1,099	1,119
7:00 PM - 8:00 PM	1,028	984	953	907
8:00 PM - 9:00 PM	782	744	765	733
9:00 PM - 10:00 PM	545	516	516	522
10:00 PM - 11:00 PM	395	403	391	384
11:00 PM - 12:00 AM	225	260	256	200
Total	**18,856**	**19,877**	**19,632**	**16,288**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 5. Broadway between Citrus St and Alford StEastbound Ramps

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

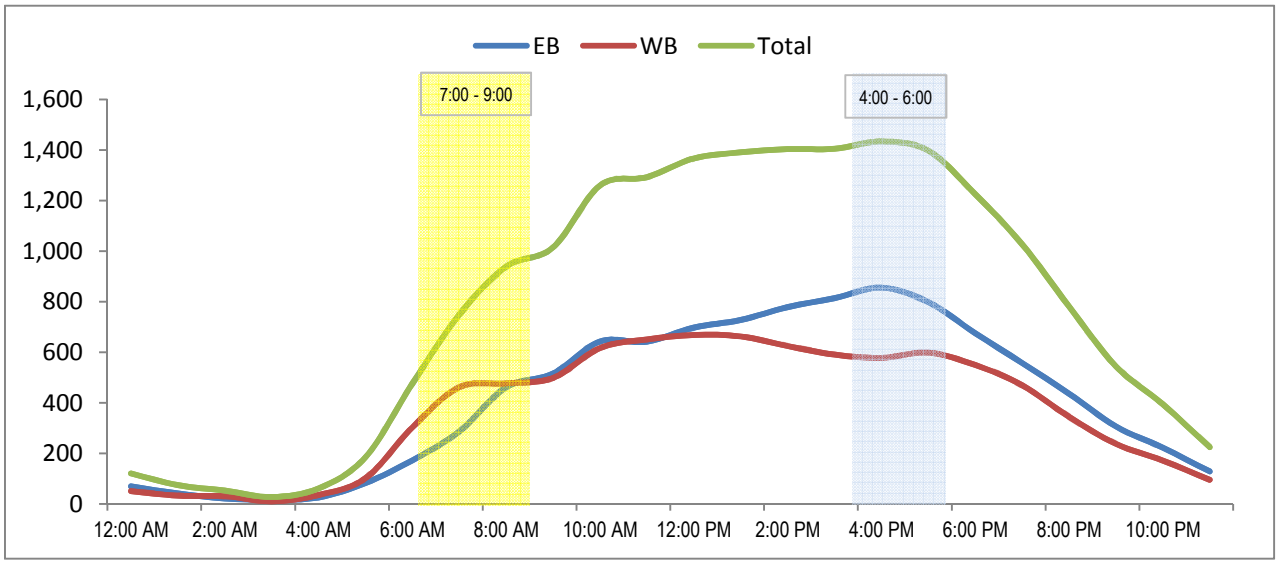
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,856*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	70	51	121
1:00 AM - 2:00 AM	42	33	75
2:00 AM - 3:00 AM	22	31	53
3:00 AM - 4:00 AM	17	11	28
4:00 AM - 5:00 AM	26	36	62
5:00 AM - 6:00 AM	83	102	185
6:00 AM - 7:00 AM	173	303	476
7:00 AM - 8:00 AM	287	462	749
8:00 AM - 9:00 AM	462	477	939
9:00 AM - 10:00 AM	516	499	1,015
10:00 AM - 11:00 AM	643	617	1,260
11:00 AM - 12:00 PM	642	651	1293
Total	**2,983**	**3,273**	**6,256**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	698	669	1,367
1:00 PM - 2:00 PM	728	663	1,391
2:00 PM - 3:00 PM	779	625	1,404
3:00 PM - 4:00 PM	814	591	1,405
4:00 PM - 5:00 PM	856	578	1,434
5:00 PM - 6:00 PM	799	599	1,398
6:00 PM - 7:00 PM	676	550	1,226
7:00 PM - 8:00 PM	558	470	1,028
8:00 PM - 9:00 PM	437	345	782
9:00 PM - 10:00 PM	307	238	545
10:00 PM - 11:00 PM	223	172	395
11:00 PM - 12:00 AM	129	96	225
Total	**7,004**	**5,596**	**12,600**

24-Hour	*EB*	*Volume*	*9,987*	*24-Hour*	*WB*	*Volume*	*8,869*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 5. Broadway between Citrus St and Alford StEastbound Ramps

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

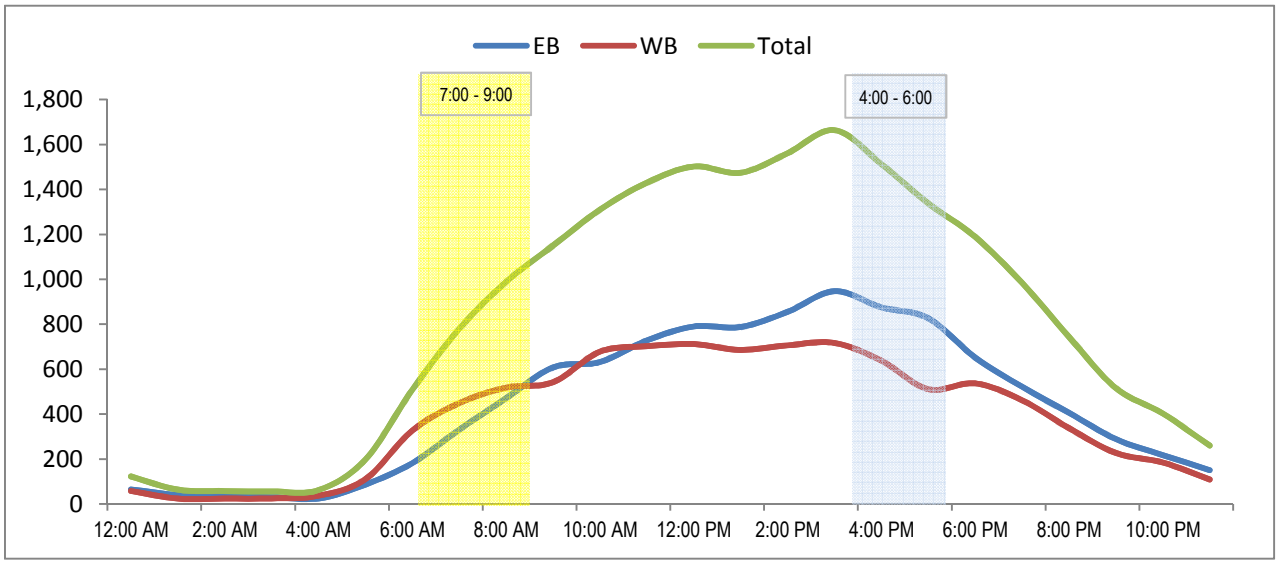
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,877*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	65	58	123
1:00 AM - 2:00 AM	40	24	64
2:00 AM - 3:00 AM	34	24	58
3:00 AM - 4:00 AM	31	25	56
4:00 AM - 5:00 AM	25	37	62
5:00 AM - 6:00 AM	87	111	198
6:00 AM - 7:00 AM	182	327	509
7:00 AM - 8:00 AM	331	449	780
8:00 AM - 9:00 AM	471	518	989
9:00 AM - 10:00 AM	608	542	1,150
10:00 AM - 11:00 AM	632	678	1,310
11:00 AM - 12:00 PM	728	702	1430
Total	**3,234**	**3,495**	**6,729**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	790	712	1,502
1:00 PM - 2:00 PM	788	686	1,474
2:00 PM - 3:00 PM	855	706	1,561
3:00 PM - 4:00 PM	947	717	1,664
4:00 PM - 5:00 PM	875	638	1,513
5:00 PM - 6:00 PM	827	511	1,338
6:00 PM - 7:00 PM	652	537	1,189
7:00 PM - 8:00 PM	522	462	984
8:00 PM - 9:00 PM	406	338	744
9:00 PM - 10:00 PM	289	227	516
10:00 PM - 11:00 PM	218	185	403
11:00 PM - 12:00 AM	151	109	260
Total	**7,320**	**5,828**	**13,148**

24-Hour	*EB*	*Volume*	*10,554*	*24-Hour*	*WB*	*Volume*	*9,323*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 5. Broadway between Citrus St and Alford StEastbound Ramps

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

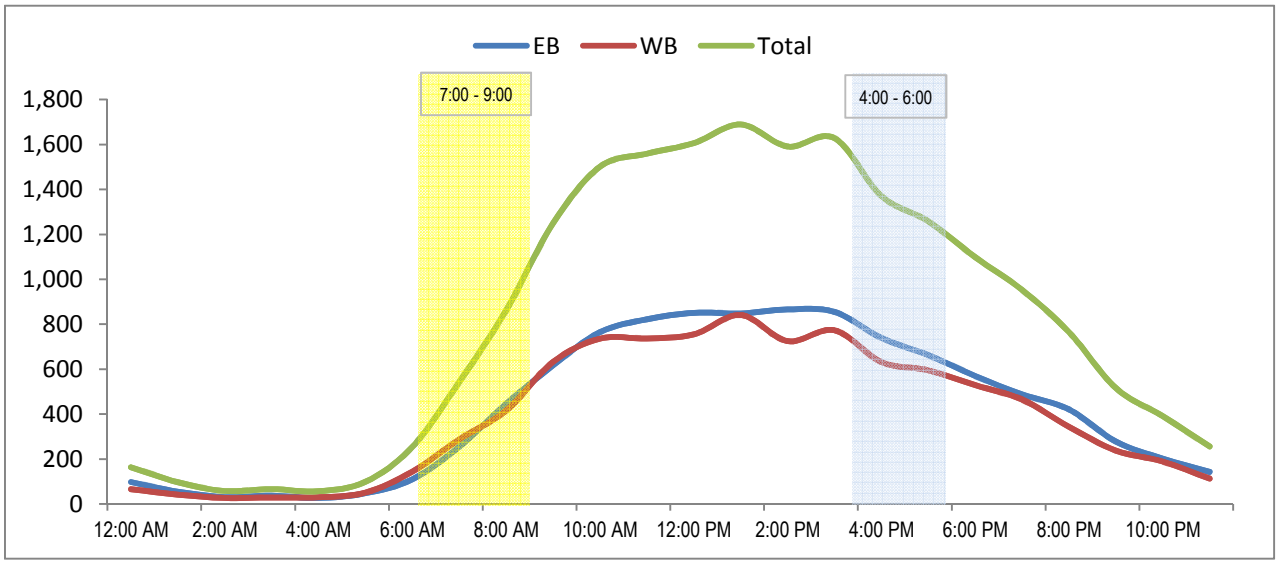
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,632*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	98	66	164
1:00 AM - 2:00 AM	55	42	97
2:00 AM - 3:00 AM	31	27	58
3:00 AM - 4:00 AM	37	29	66
4:00 AM - 5:00 AM	27	30	57
5:00 AM - 6:00 AM	48	51	99
6:00 AM - 7:00 AM	110	144	254
7:00 AM - 8:00 AM	255	288	543
8:00 AM - 9:00 AM	446	416	862
9:00 AM - 10:00 AM	617	632	1,249
10:00 AM - 11:00 AM	765	736	1,501
11:00 AM - 12:00 PM	822	737	1559
Total	**3,311**	**3,198**	**6,509**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	851	755	1,606
1:00 PM - 2:00 PM	848	841	1,689
2:00 PM - 3:00 PM	866	725	1,591
3:00 PM - 4:00 PM	855	773	1,628
4:00 PM - 5:00 PM	739	632	1,371
5:00 PM - 6:00 PM	663	595	1,258
6:00 PM - 7:00 PM	570	529	1,099
7:00 PM - 8:00 PM	488	465	953
8:00 PM - 9:00 PM	421	344	765
9:00 PM - 10:00 PM	278	238	516
10:00 PM - 11:00 PM	202	189	391
11:00 PM - 12:00 AM	143	113	256
Total	**6,924**	**6,199**	**13,123**

24-Hour	*EB*	*Volume*	*10,235*	*24-Hour*	*WB*	*Volume*	*9,397*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 5. Broadway between Citrus St and Alford StEastbound Ramps

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

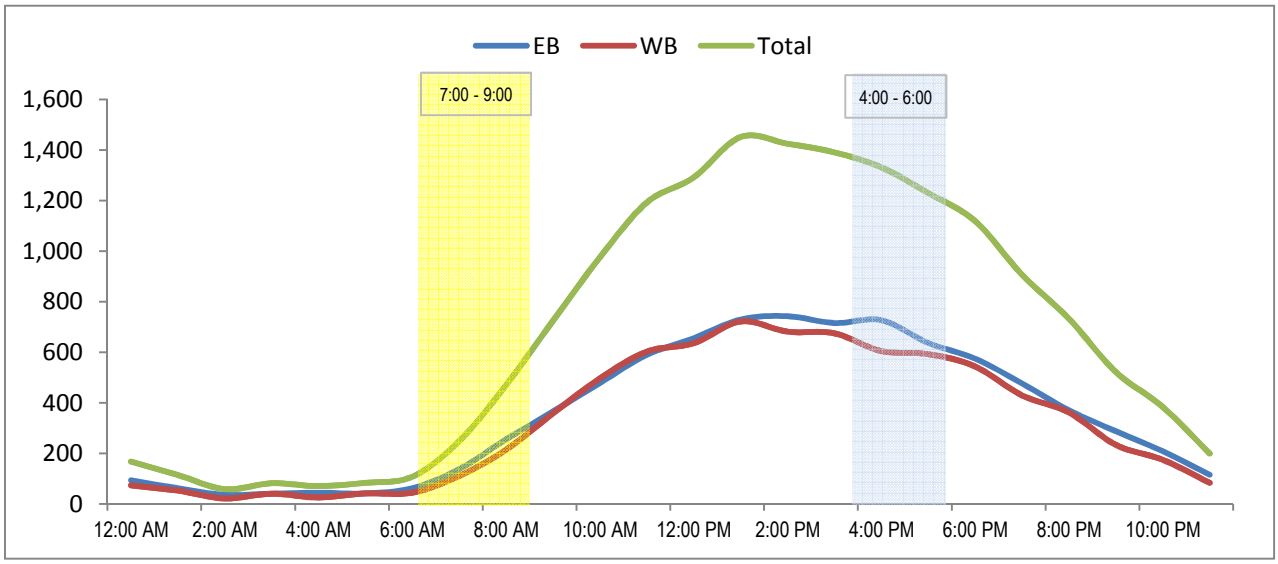
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*16,288*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	94	74	168
1:00 AM - 2:00 AM	62	53	115
2:00 AM - 3:00 AM	37	22	59
3:00 AM - 4:00 AM	41	41	82
4:00 AM - 5:00 AM	45	26	71
5:00 AM - 6:00 AM	42	42	84
6:00 AM - 7:00 AM	63	45	108
7:00 AM - 8:00 AM	138	111	249
8:00 AM - 9:00 AM	256	215	471
9:00 AM - 10:00 AM	366	359	725
10:00 AM - 11:00 AM	479	497	976
11:00 AM - 12:00 PM	590	603	1193
Total	**2,213**	**2,088**	**4,301**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	656	636	1,292
1:00 PM - 2:00 PM	730	722	1,452
2:00 PM - 3:00 PM	743	682	1,425
3:00 PM - 4:00 PM	716	675	1,391
4:00 PM - 5:00 PM	727	605	1,332
5:00 PM - 6:00 PM	637	593	1,230
6:00 PM - 7:00 PM	575	544	1,119
7:00 PM - 8:00 PM	477	430	907
8:00 PM - 9:00 PM	371	362	733
9:00 PM - 10:00 PM	288	234	522
10:00 PM - 11:00 PM	209	175	384
11:00 PM - 12:00 AM	116	84	200
Total	**6,245**	**5,742**	**11,987**

24-Hour	*EB*	*Volume*	*8,458*	*24-Hour*	*WB*	*Volume*	*7,830*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

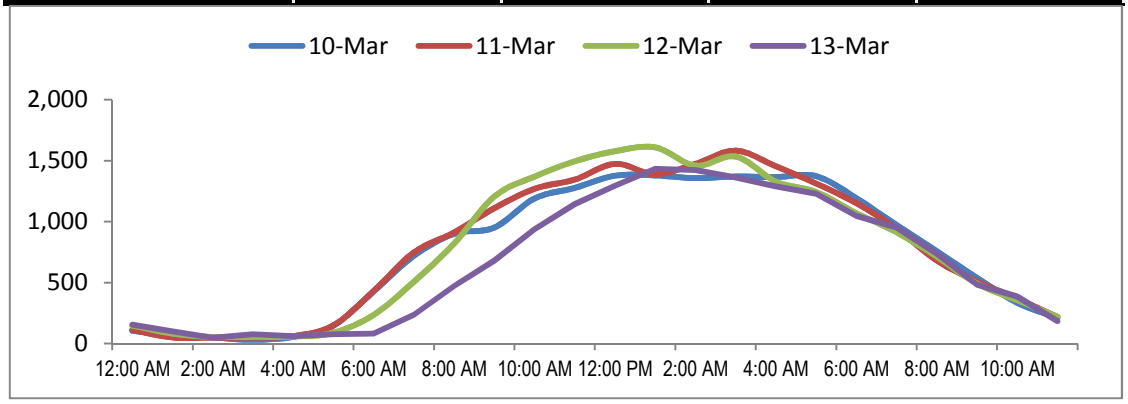
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 6. Broadway between West St and New Jersey Ave
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***17,878***
Highest Daily Traffic	***18,841***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	105	112	147	156
1:00 AM - 2:00 AM	62	49	82	99
2:00 AM - 3:00 AM	49	49	54	48
3:00 AM - 4:00 AM	31	50	55	77
4:00 AM - 5:00 AM	55	62	57	62
5:00 AM - 6:00 AM	148	149	89	77
6:00 AM - 7:00 AM	428	432	236	81
7:00 AM - 8:00 AM	720	747	507	236
8:00 AM - 9:00 AM	900	912	821	472
9:00 AM - 10:00 AM	952	1,110	1,206	680
10:00 AM - 11:00 AM	1,190	1,270	1,370	937
11:00 AM - 12:00 PM	1,277	1,345	1,495	1,146
12:00 PM - 1:00 PM	1,377	1,474	1,578	1,295
1:00 PM - 2:00 PM	1,379	1,388	1,609	1,434
2:00 PM - 3:00 PM	1,357	1,474	1,459	1,424
3:00 PM - 4:00 PM	1,370	1,582	1,534	1,363
4:00 PM - 5:00 PM	1,365	1,454	1,328	1,289
5:00 PM - 6:00 PM	1,373	1,313	1,244	1,229
6:00 PM - 7:00 PM	1,192	1,152	1,069	1,048
7:00 PM - 8:00 PM	972	942	913	952
8:00 PM - 9:00 PM	757	681	712	737
9:00 PM - 10:00 PM	539	509	493	484
10:00 PM - 11:00 PM	335	368	356	385
11:00 PM - 12:00 AM	210	217	221	183
Total	**18,143**	**18,841**	**18,635**	**15,894**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 6. Broadway between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

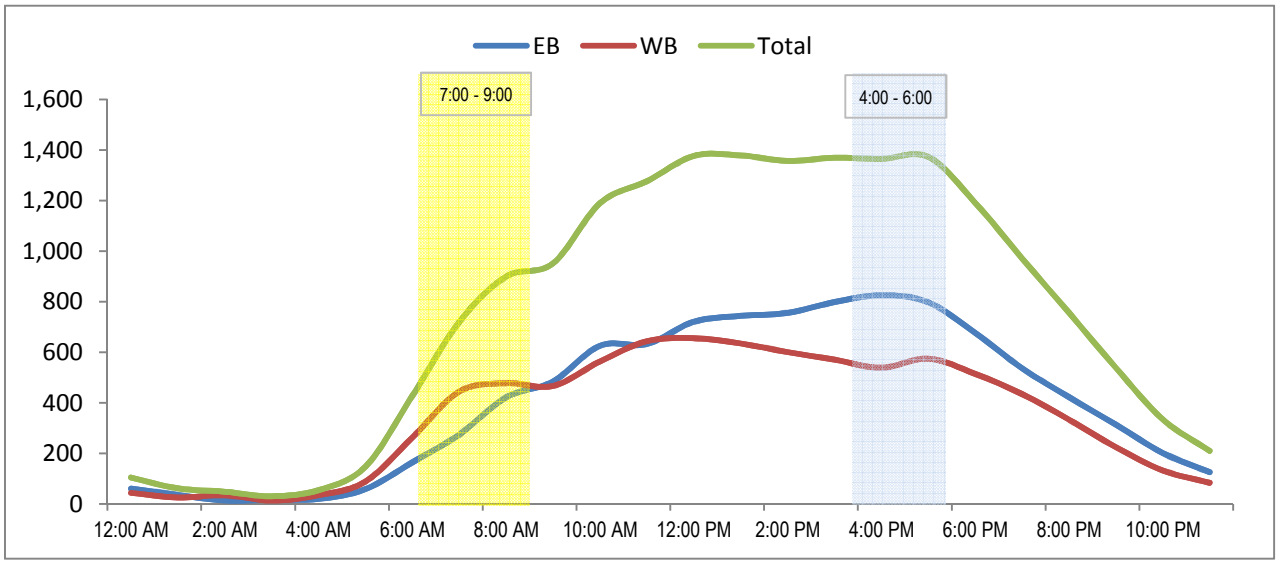
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,143*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	61	44	105
1:00 AM - 2:00 AM	36	26	62
2:00 AM - 3:00 AM	14	35	49
3:00 AM - 4:00 AM	17	14	31
4:00 AM - 5:00 AM	20	35	55
5:00 AM - 6:00 AM	59	89	148
6:00 AM - 7:00 AM	165	263	428
7:00 AM - 8:00 AM	275	445	720
8:00 AM - 9:00 AM	422	478	900
9:00 AM - 10:00 AM	485	467	952
10:00 AM - 11:00 AM	626	564	1,190
11:00 AM - 12:00 PM	633	644	1277
Total	**2,813**	**3,104**	**5,917**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	721	656	1,377
1:00 PM - 2:00 PM	744	635	1,379
2:00 PM - 3:00 PM	756	601	1,357
3:00 PM - 4:00 PM	799	571	1,370
4:00 PM - 5:00 PM	826	539	1,365
5:00 PM - 6:00 PM	798	575	1,373
6:00 PM - 7:00 PM	677	515	1,192
7:00 PM - 8:00 PM	537	435	972
8:00 PM - 9:00 PM	423	334	757
9:00 PM - 10:00 PM	314	225	539
10:00 PM - 11:00 PM	202	133	335
11:00 PM - 12:00 AM	126	84	210
Total	**6,923**	**5,303**	**12,226**

24-Hour	*EB*	*Volume*	*9,736*	*24-Hour*	*WB*	*Volume*	*8,407*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 6. Broadway between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

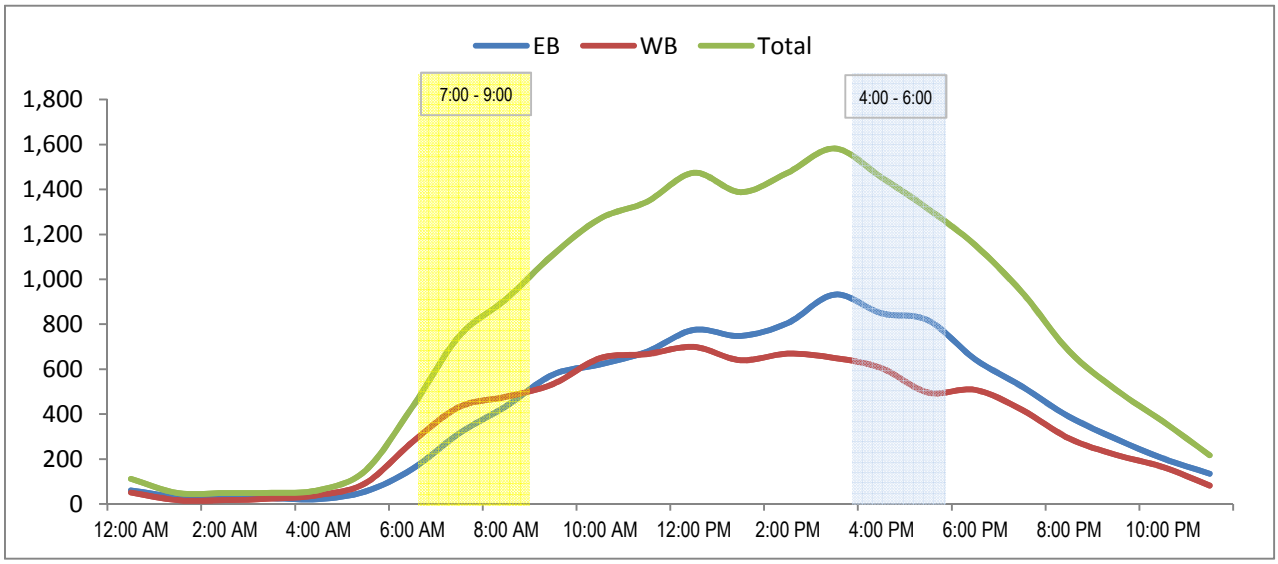
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,841*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	61	51	112
1:00 AM - 2:00 AM	32	17	49
2:00 AM - 3:00 AM	32	17	49
3:00 AM - 4:00 AM	26	24	50
4:00 AM - 5:00 AM	22	40	62
5:00 AM - 6:00 AM	56	93	149
6:00 AM - 7:00 AM	156	276	432
7:00 AM - 8:00 AM	315	432	747
8:00 AM - 9:00 AM	435	477	912
9:00 AM - 10:00 AM	576	534	1,110
10:00 AM - 11:00 AM	621	649	1,270
11:00 AM - 12:00 PM	678	667	1345
Total	**3,010**	**3,277**	**6,287**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	775	699	1,474
1:00 PM - 2:00 PM	748	640	1,388
2:00 PM - 3:00 PM	805	669	1,474
3:00 PM - 4:00 PM	932	650	1,582
4:00 PM - 5:00 PM	849	605	1,454
5:00 PM - 6:00 PM	817	496	1,313
6:00 PM - 7:00 PM	644	508	1,152
7:00 PM - 8:00 PM	523	419	942
8:00 PM - 9:00 PM	389	292	681
9:00 PM - 10:00 PM	290	219	509
10:00 PM - 11:00 PM	203	165	368
11:00 PM - 12:00 AM	135	82	217
Total	**7,110**	**5,444**	**12,554**

24-Hour	*EB*	*Volume*	*10,120*	*24-Hour*	*WB*	*Volume*	*8,721*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 6. Broadway between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

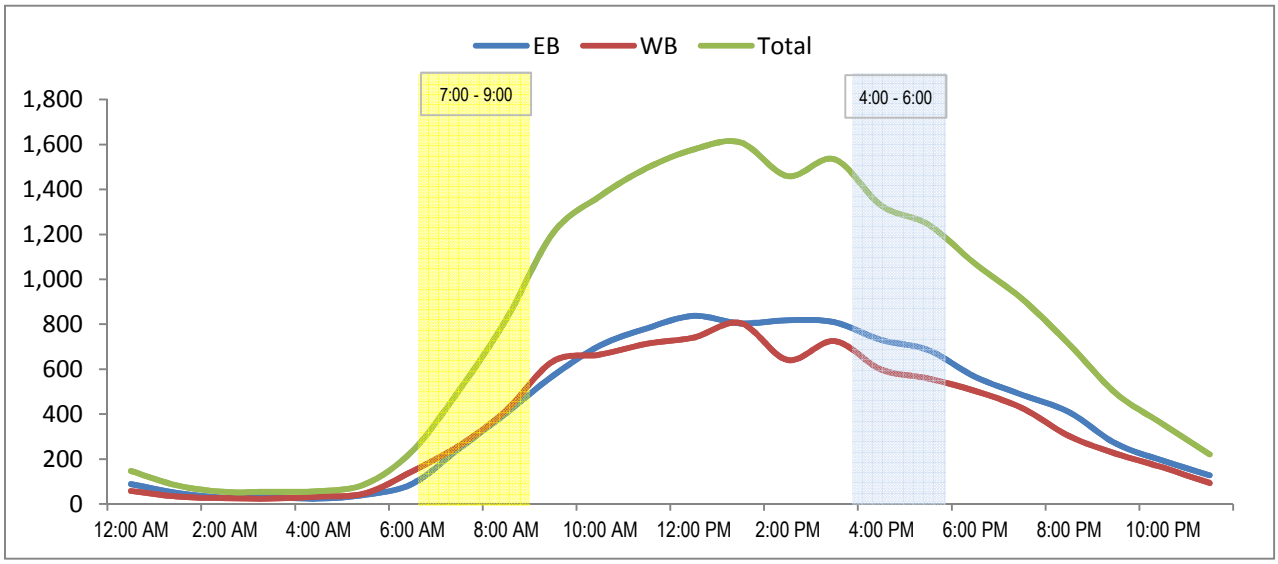
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,635*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	89	58	147
1:00 AM - 2:00 AM	49	33	82
2:00 AM - 3:00 AM	28	26	54
3:00 AM - 4:00 AM	31	24	55
4:00 AM - 5:00 AM	24	33	57
5:00 AM - 6:00 AM	41	48	89
6:00 AM - 7:00 AM	90	146	236
7:00 AM - 8:00 AM	247	260	507
8:00 AM - 9:00 AM	404	417	821
9:00 AM - 10:00 AM	571	635	1,206
10:00 AM - 11:00 AM	705	665	1,370
11:00 AM - 12:00 PM	782	713	1495
Total	**3,061**	**3,058**	**6,119**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	837	741	1,578
1:00 PM - 2:00 PM	804	805	1,609
2:00 PM - 3:00 PM	818	641	1,459
3:00 PM - 4:00 PM	809	725	1,534
4:00 PM - 5:00 PM	730	598	1,328
5:00 PM - 6:00 PM	685	559	1,244
6:00 PM - 7:00 PM	566	503	1,069
7:00 PM - 8:00 PM	486	427	913
8:00 PM - 9:00 PM	409	303	712
9:00 PM - 10:00 PM	269	224	493
10:00 PM - 11:00 PM	193	163	356
11:00 PM - 12:00 AM	128	93	221
Total	**6,734**	**5,782**	**12,516**

24-Hour	*EB*	*Volume*	*9,795*	*24-Hour*	*WB*	*Volume*	*8,840*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 6. Broadway between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

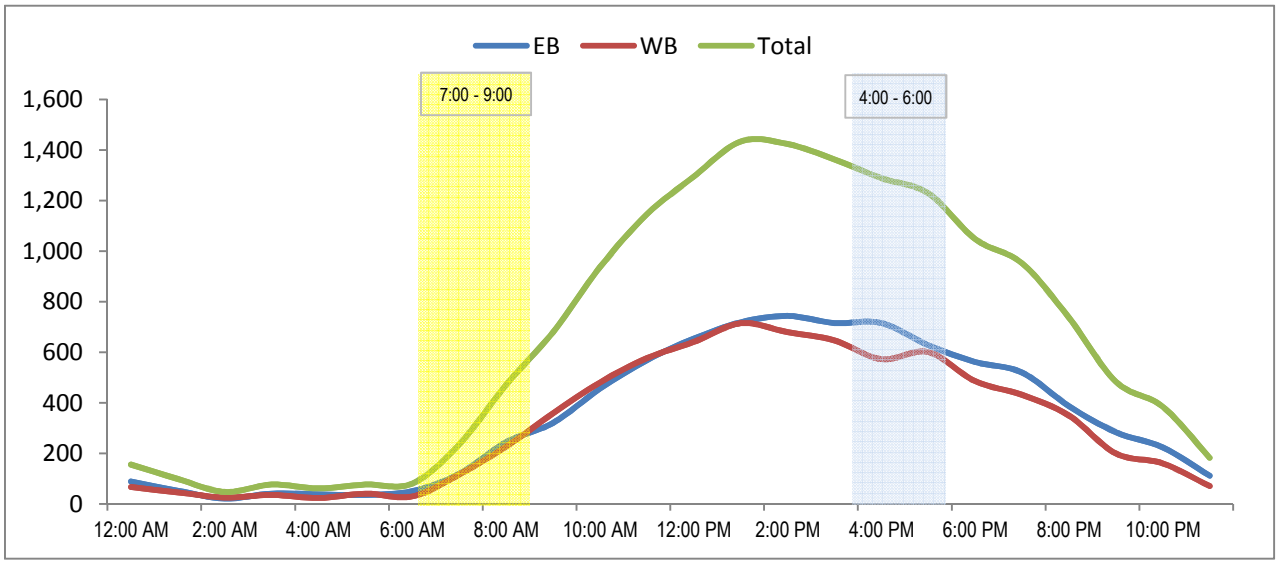
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*15,894*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	89	67	156
1:00 AM - 2:00 AM	53	46	99
2:00 AM - 3:00 AM	22	26	48
3:00 AM - 4:00 AM	41	36	77
4:00 AM - 5:00 AM	38	24	62
5:00 AM - 6:00 AM	36	41	77
6:00 AM - 7:00 AM	51	30	81
7:00 AM - 8:00 AM	119	117	236
8:00 AM - 9:00 AM	245	227	472
9:00 AM - 10:00 AM	321	359	680
10:00 AM - 11:00 AM	456	481	937
11:00 AM - 12:00 PM	569	577	1146
Total	**2,040**	**2,031**	**4,071**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	654	641	1,295
1:00 PM - 2:00 PM	719	715	1,434
2:00 PM - 3:00 PM	744	680	1,424
3:00 PM - 4:00 PM	716	647	1,363
4:00 PM - 5:00 PM	716	573	1,289
5:00 PM - 6:00 PM	628	601	1,229
6:00 PM - 7:00 PM	562	486	1,048
7:00 PM - 8:00 PM	520	432	952
8:00 PM - 9:00 PM	387	350	737
9:00 PM - 10:00 PM	284	200	484
10:00 PM - 11:00 PM	224	161	385
11:00 PM - 12:00 AM	112	71	183
Total	**6,266**	**5,557**	**11,823**

24-Hour	*EB*	*Volume*	*8,306*	*24-Hour*	*WB*	*Volume*	*7,588*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

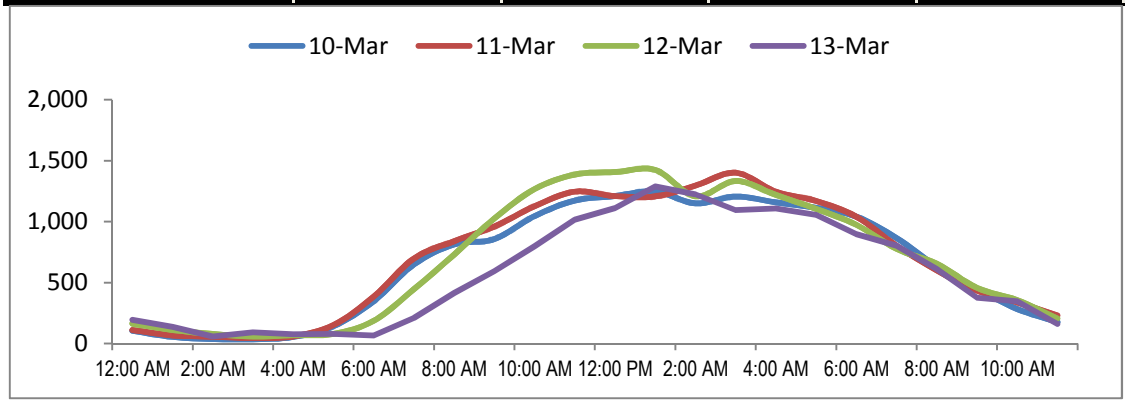
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 7. Broadway between Buena Vista Ave and Olive St
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***15,774***
Highest Daily Traffic	***16,721***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	105	111	164	195
1:00 AM - 2:00 AM	54	67	111	137
2:00 AM - 3:00 AM	37	56	79	57
3:00 AM - 4:00 AM	35	45	57	91
4:00 AM - 5:00 AM	54	59	69	76
5:00 AM - 6:00 AM	142	152	79	78
6:00 AM - 7:00 AM	348	386	187	67
7:00 AM - 8:00 AM	649	698	446	211
8:00 AM - 9:00 AM	814	840	730	415
9:00 AM - 10:00 AM	857	960	1,026	593
10:00 AM - 11:00 AM	1,046	1,127	1,267	798
11:00 AM - 12:00 PM	1,173	1,246	1,386	1,016
12:00 PM - 1:00 PM	1,210	1,209	1,406	1,110
1:00 PM - 2:00 PM	1,248	1,207	1,424	1,288
2:00 PM - 3:00 PM	1,150	1,296	1,208	1,223
3:00 PM - 4:00 PM	1,206	1,401	1,333	1,095
4:00 PM - 5:00 PM	1,158	1,245	1,219	1,107
5:00 PM - 6:00 PM	1,114	1,170	1,105	1,055
6:00 PM - 7:00 PM	1,041	1,040	974	897
7:00 PM - 8:00 PM	866	802	777	804
8:00 PM - 9:00 PM	632	600	655	613
9:00 PM - 10:00 PM	450	433	457	375
10:00 PM - 11:00 PM	283	339	356	346
11:00 PM - 12:00 AM	178	229	206	160
Total	**15,850**	**16,718**	**16,721**	**13,807**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 7. Broadway between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

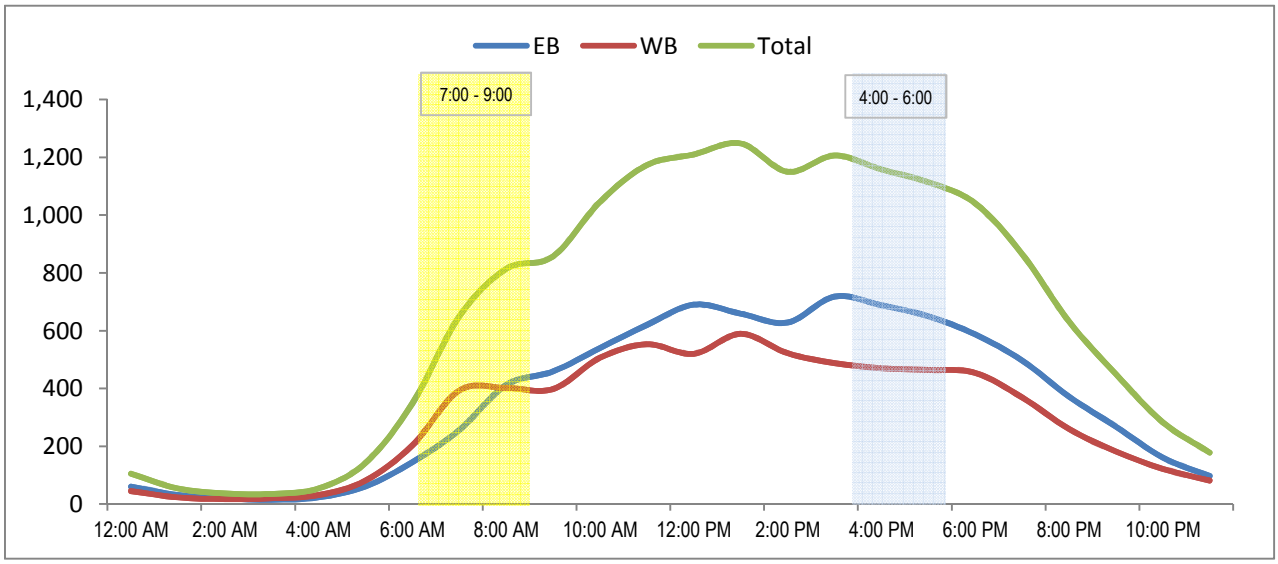
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*15,850*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	60	45	105
1:00 AM - 2:00 AM	31	23	54
2:00 AM - 3:00 AM	20	17	37
3:00 AM - 4:00 AM	15	20	35
4:00 AM - 5:00 AM	23	31	54
5:00 AM - 6:00 AM	61	81	142
6:00 AM - 7:00 AM	145	203	348
7:00 AM - 8:00 AM	256	393	649
8:00 AM - 9:00 AM	412	402	814
9:00 AM - 10:00 AM	459	398	857
10:00 AM - 11:00 AM	540	506	1,046
11:00 AM - 12:00 PM	620	553	1173
Total	**2,642**	**2,672**	**5,314**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	690	520	1,210
1:00 PM - 2:00 PM	659	589	1,248
2:00 PM - 3:00 PM	628	522	1,150
3:00 PM - 4:00 PM	718	488	1,206
4:00 PM - 5:00 PM	688	470	1,158
5:00 PM - 6:00 PM	650	464	1,114
6:00 PM - 7:00 PM	587	454	1,041
7:00 PM - 8:00 PM	497	369	866
8:00 PM - 9:00 PM	372	260	632
9:00 PM - 10:00 PM	268	182	450
10:00 PM - 11:00 PM	161	122	283
11:00 PM - 12:00 AM	97	81	178
Total	**6,015**	**4,521**	**10,536**

24-Hour	*EB*	*Volume*	*8,657*	*24-Hour*	*WB*	*Volume*	*7,193*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 7. Broadway between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

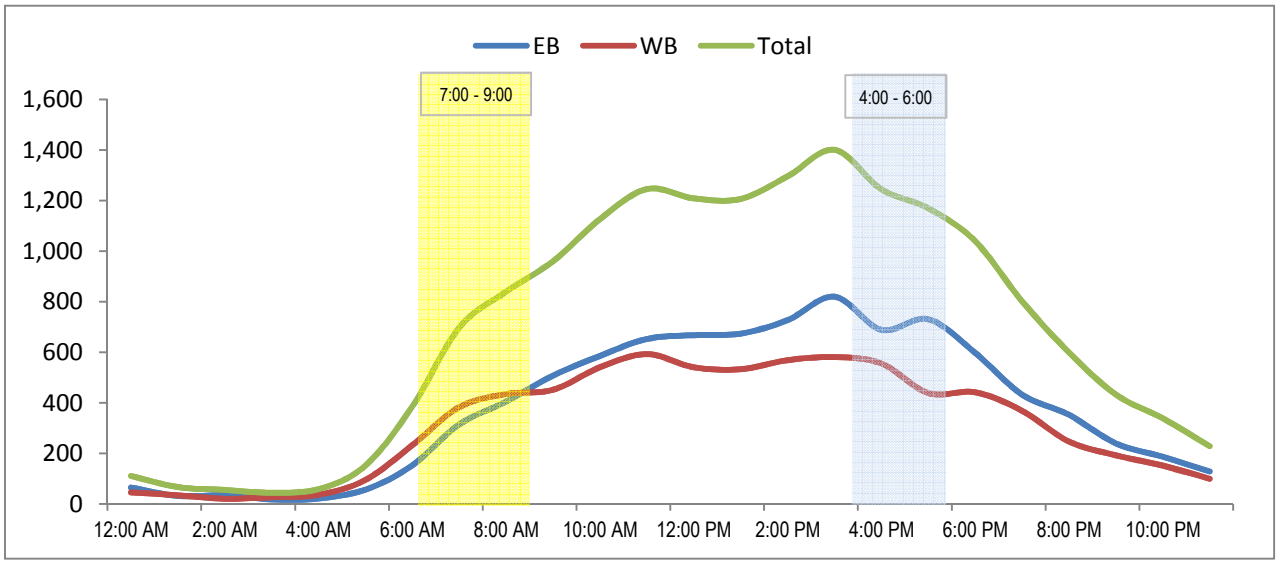
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*16,718*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	65	46	111
1:00 AM - 2:00 AM	32	35	67
2:00 AM - 3:00 AM	35	21	56
3:00 AM - 4:00 AM	18	27	45
4:00 AM - 5:00 AM	22	37	59
5:00 AM - 6:00 AM	57	95	152
6:00 AM - 7:00 AM	153	233	386
7:00 AM - 8:00 AM	315	383	698
8:00 AM - 9:00 AM	405	435	840
9:00 AM - 10:00 AM	508	452	960
10:00 AM - 11:00 AM	586	541	1,127
11:00 AM - 12:00 PM	653	593	1246
Total	**2,849**	**2,898**	**5,747**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	668	541	1,209
1:00 PM - 2:00 PM	674	533	1,207
2:00 PM - 3:00 PM	727	569	1,296
3:00 PM - 4:00 PM	820	581	1,401
4:00 PM - 5:00 PM	689	556	1,245
5:00 PM - 6:00 PM	731	439	1,170
6:00 PM - 7:00 PM	598	442	1,040
7:00 PM - 8:00 PM	433	369	802
8:00 PM - 9:00 PM	353	247	600
9:00 PM - 10:00 PM	240	193	433
10:00 PM - 11:00 PM	187	152	339
11:00 PM - 12:00 AM	129	100	229
Total	**6,249**	**4,722**	**10,971**

24-Hour	*EB*	*Volume*	*9,098*	*24-Hour*	*WB*	*Volume*	*7,620*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 7. Broadway between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

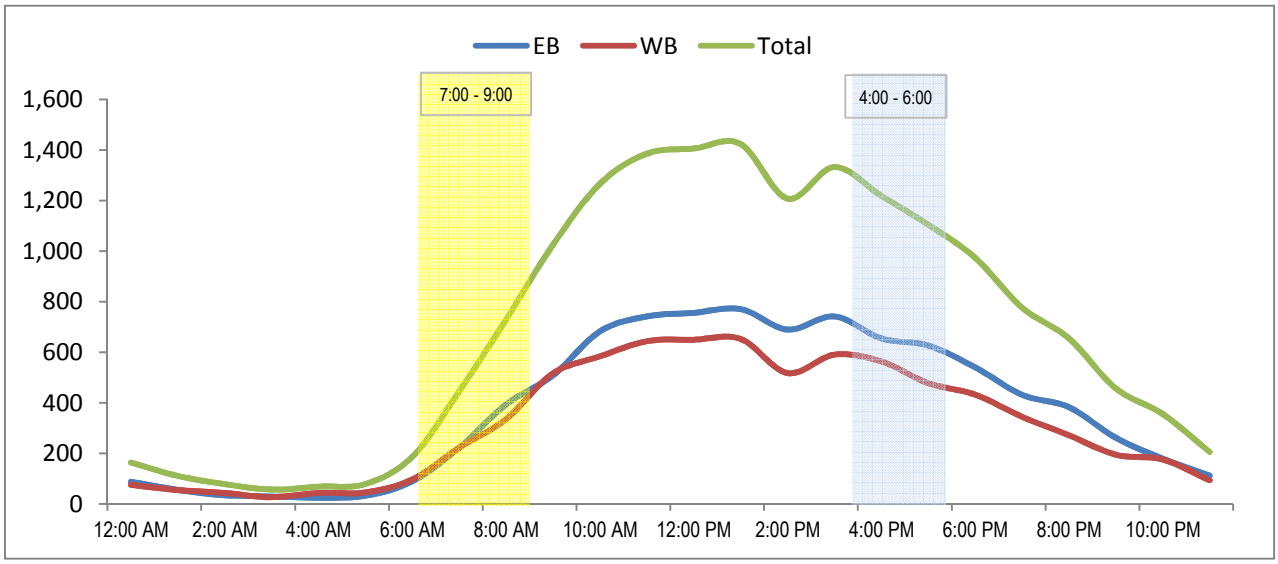
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*16,721*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	88	76	164
1:00 AM - 2:00 AM	56	55	111
2:00 AM - 3:00 AM	35	44	79
3:00 AM - 4:00 AM	30	27	57
4:00 AM - 5:00 AM	25	44	69
5:00 AM - 6:00 AM	33	46	79
6:00 AM - 7:00 AM	90	97	187
7:00 AM - 8:00 AM	223	223	446
8:00 AM - 9:00 AM	394	336	730
9:00 AM - 10:00 AM	509	517	1,026
10:00 AM - 11:00 AM	683	584	1,267
11:00 AM - 12:00 PM	742	644	1386
Total	**2,908**	**2,693**	**5,601**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	756	650	1,406
1:00 PM - 2:00 PM	771	653	1,424
2:00 PM - 3:00 PM	690	518	1,208
3:00 PM - 4:00 PM	742	591	1,333
4:00 PM - 5:00 PM	655	564	1,219
5:00 PM - 6:00 PM	627	478	1,105
6:00 PM - 7:00 PM	541	433	974
7:00 PM - 8:00 PM	432	345	777
8:00 PM - 9:00 PM	383	272	655
9:00 PM - 10:00 PM	262	195	457
10:00 PM - 11:00 PM	180	176	356
11:00 PM - 12:00 AM	112	94	206
Total	**6,151**	**4,969**	**11,120**

24-Hour	*EB*	*Volume*	*9,059*	*24-Hour*	*WB*	*Volume*	*7,662*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 7. Broadway between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

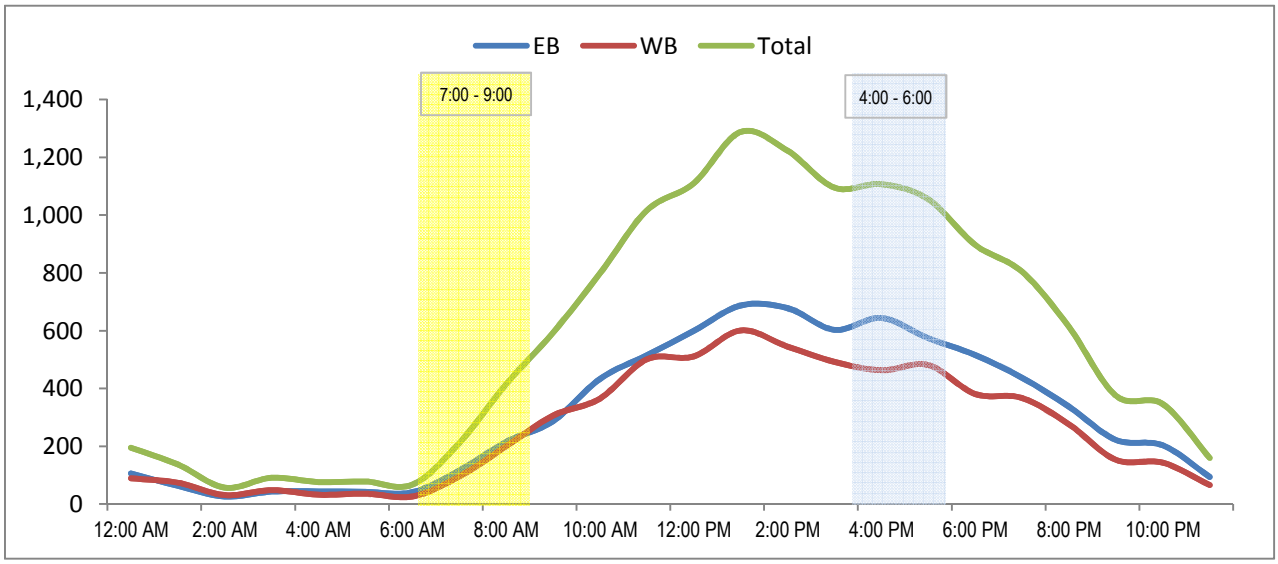
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*13,807*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	106	89	195
1:00 AM - 2:00 AM	63	74	137
2:00 AM - 3:00 AM	26	31	57
3:00 AM - 4:00 AM	43	48	91
4:00 AM - 5:00 AM	44	32	76
5:00 AM - 6:00 AM	42	36	78
6:00 AM - 7:00 AM	41	26	67
7:00 AM - 8:00 AM	116	95	211
8:00 AM - 9:00 AM	215	200	415
9:00 AM - 10:00 AM	287	306	593
10:00 AM - 11:00 AM	433	365	798
11:00 AM - 12:00 PM	515	501	1016
Total	**1,931**	**1,803**	**3,734**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	599	511	1,110
1:00 PM - 2:00 PM	687	601	1,288
2:00 PM - 3:00 PM	678	545	1,223
3:00 PM - 4:00 PM	603	492	1,095
4:00 PM - 5:00 PM	644	463	1,107
5:00 PM - 6:00 PM	574	481	1,055
6:00 PM - 7:00 PM	516	381	897
7:00 PM - 8:00 PM	437	367	804
8:00 PM - 9:00 PM	337	276	613
9:00 PM - 10:00 PM	222	153	375
10:00 PM - 11:00 PM	203	143	346
11:00 PM - 12:00 AM	94	66	160
Total	**5,594**	**4,479**	**10,073**

24-Hour	*EB*	*Volume*	*7,525*	*24-Hour*	*WB*	*Volume*	*6,282*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

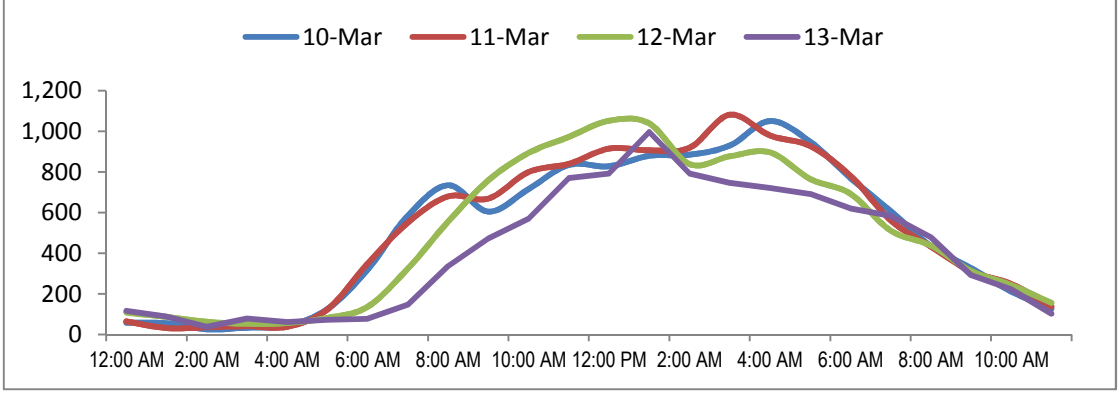
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 8. Broadway between Lemon Grove Ave and Grove St
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***11,593***
Highest Daily Traffic	***12,433***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	59	65	109	117
1:00 AM - 2:00 AM	56	32	87	89
2:00 AM - 3:00 AM	26	36	63	38
3:00 AM - 4:00 AM	34	41	53	79
4:00 AM - 5:00 AM	44	38	57	61
5:00 AM - 6:00 AM	126	124	82	73
6:00 AM - 7:00 AM	320	350	137	77
7:00 AM - 8:00 AM	585	551	325	147
8:00 AM - 9:00 AM	735	680	556	338
9:00 AM - 10:00 AM	605	669	759	472
10:00 AM - 11:00 AM	716	800	894	570
11:00 AM - 12:00 PM	835	840	973	770
12:00 PM - 1:00 PM	828	915	1,052	792
1:00 PM - 2:00 PM	880	907	1,039	997
2:00 PM - 3:00 PM	885	919	839	792
3:00 PM - 4:00 PM	930	1,082	877	747
4:00 PM - 5:00 PM	1,051	980	897	721
5:00 PM - 6:00 PM	949	928	766	691
6:00 PM - 7:00 PM	772	782	693	621
7:00 PM - 8:00 PM	608	563	512	584
8:00 PM - 9:00 PM	436	433	438	479
9:00 PM - 10:00 PM	327	311	314	291
10:00 PM - 11:00 PM	212	249	244	222
11:00 PM - 12:00 AM	127	138	156	103
Total	**12,146**	**12,433**	**11,922**	**9,871**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 8. Broadway between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

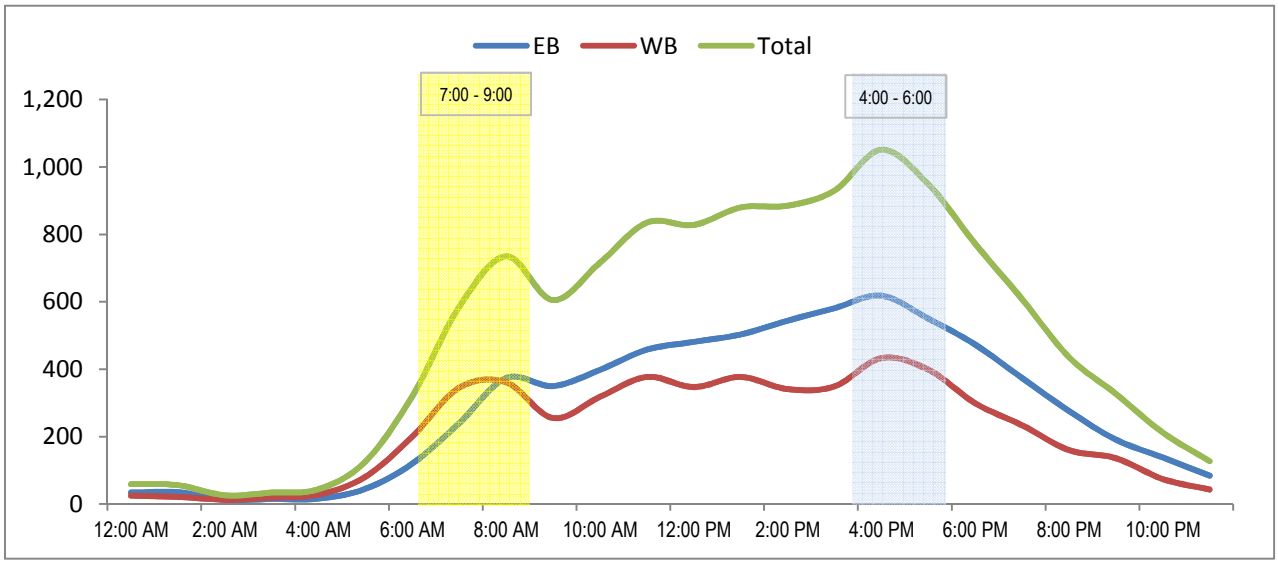
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*12,146*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	34	25	59
1:00 AM - 2:00 AM	35	21	56
2:00 AM - 3:00 AM	13	13	26
3:00 AM - 4:00 AM	15	19	34
4:00 AM - 5:00 AM	16	28	44
5:00 AM - 6:00 AM	45	81	126
6:00 AM - 7:00 AM	120	200	320
7:00 AM - 8:00 AM	240	345	585
8:00 AM - 9:00 AM	374	361	735
9:00 AM - 10:00 AM	350	255	605
10:00 AM - 11:00 AM	398	318	716
11:00 AM - 12:00 PM	458	377	835
Total	**2,098**	**2,043**	**4,141**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	481	347	828
1:00 PM - 2:00 PM	503	377	880
2:00 PM - 3:00 PM	544	341	885
3:00 PM - 4:00 PM	581	349	930
4:00 PM - 5:00 PM	618	433	1,051
5:00 PM - 6:00 PM	550	399	949
6:00 PM - 7:00 PM	473	299	772
7:00 PM - 8:00 PM	374	234	608
8:00 PM - 9:00 PM	276	160	436
9:00 PM - 10:00 PM	191	136	327
10:00 PM - 11:00 PM	138	74	212
11:00 PM - 12:00 AM	84	43	127
Total	**4,813**	**3,192**	**8,005**

24-Hour	*EB*	*Volume*	*6,911*	*24-Hour*	*WB*	*Volume*	*5,235*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 8. Broadway between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

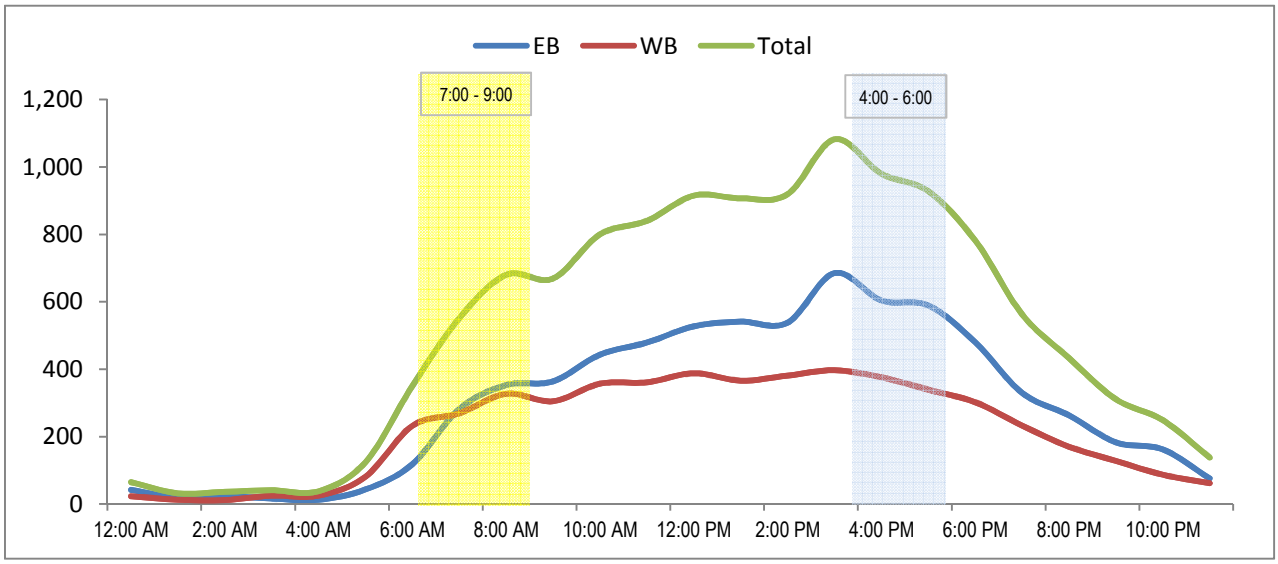
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***12,433***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	42	23	65
1:00 AM - 2:00 AM	19	13	32
2:00 AM - 3:00 AM	24	12	36
3:00 AM - 4:00 AM	16	25	41
4:00 AM - 5:00 AM	13	25	38
5:00 AM - 6:00 AM	43	81	124
6:00 AM - 7:00 AM	118	232	350
7:00 AM - 8:00 AM	282	269	551
8:00 AM - 9:00 AM	353	327	680
9:00 AM - 10:00 AM	364	305	669
10:00 AM - 11:00 AM	443	357	800
11:00 AM - 12:00 PM	479	361	840
Total	**2,196**	**2,030**	**4,226**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	527	388	915
1:00 PM - 2:00 PM	541	366	907
2:00 PM - 3:00 PM	538	381	919
3:00 PM - 4:00 PM	685	397	1,082
4:00 PM - 5:00 PM	604	376	980
5:00 PM - 6:00 PM	589	339	928
6:00 PM - 7:00 PM	480	302	782
7:00 PM - 8:00 PM	330	233	563
8:00 PM - 9:00 PM	263	170	433
9:00 PM - 10:00 PM	183	128	311
10:00 PM - 11:00 PM	162	87	249
11:00 PM - 12:00 AM	76	62	138
Total	**4,978**	**3,229**	**8,207**

24-Hour	***EB***	***Volume***	***7,174***	***24-Hour***	***WB***	***Volume***	***5,259***



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 8. Broadway between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

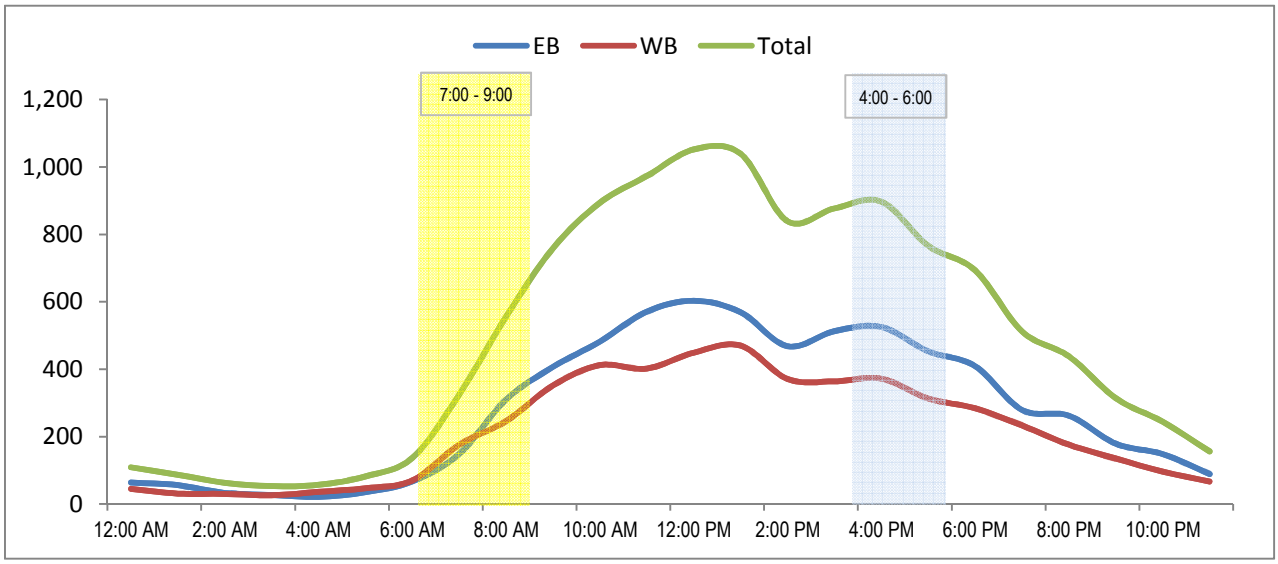
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*11,922*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	64	45	109
1:00 AM - 2:00 AM	56	31	87
2:00 AM - 3:00 AM	33	30	63
3:00 AM - 4:00 AM	27	26	53
4:00 AM - 5:00 AM	21	36	57
5:00 AM - 6:00 AM	35	47	82
6:00 AM - 7:00 AM	67	70	137
7:00 AM - 8:00 AM	149	176	325
8:00 AM - 9:00 AM	310	246	556
9:00 AM - 10:00 AM	407	352	759
10:00 AM - 11:00 AM	482	412	894
11:00 AM - 12:00 PM	571	402	973
Total	**2,222**	**1,873**	**4,095**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	603	449	1,052
1:00 PM - 2:00 PM	569	470	1,039
2:00 PM - 3:00 PM	468	371	839
3:00 PM - 4:00 PM	513	364	877
4:00 PM - 5:00 PM	525	372	897
5:00 PM - 6:00 PM	453	313	766
6:00 PM - 7:00 PM	409	284	693
7:00 PM - 8:00 PM	279	233	512
8:00 PM - 9:00 PM	262	176	438
9:00 PM - 10:00 PM	179	135	314
10:00 PM - 11:00 PM	148	96	244
11:00 PM - 12:00 AM	89	67	156
Total	**4,497**	**3,330**	**7,827**

24-Hour	*EB*	*Volume*	*6,719*	*24-Hour*	*WB*	*Volume*	*5,203*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 8. Broadway between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

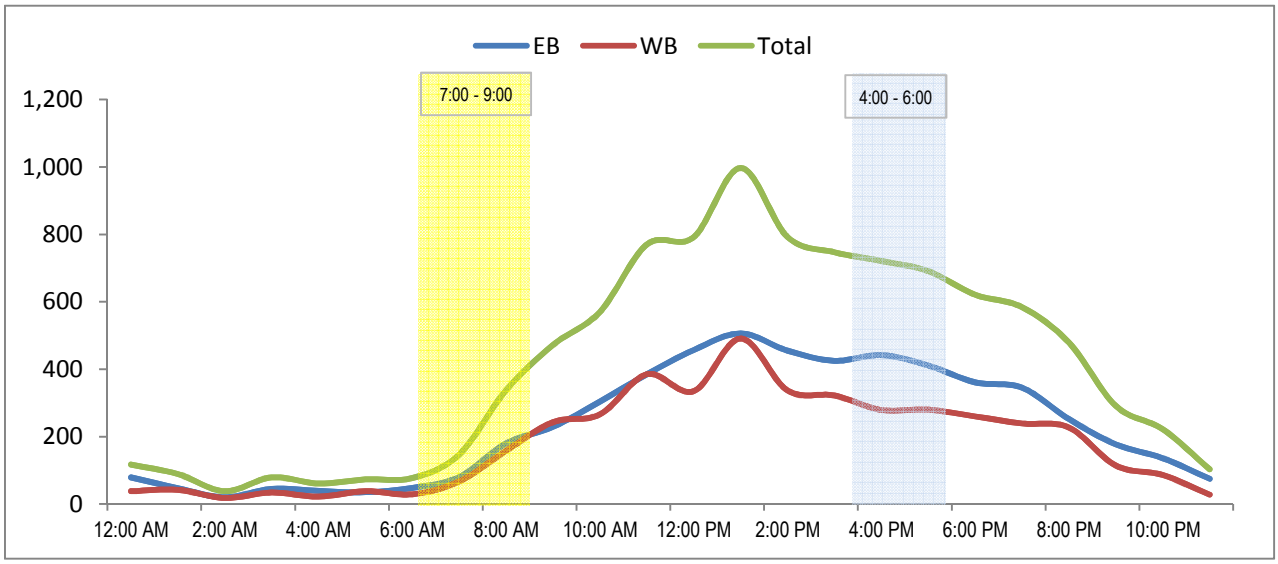
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*9,871*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	79	38	117
1:00 AM - 2:00 AM	47	42	89
2:00 AM - 3:00 AM	20	18	38
3:00 AM - 4:00 AM	45	34	79
4:00 AM - 5:00 AM	39	22	61
5:00 AM - 6:00 AM	35	38	73
6:00 AM - 7:00 AM	48	29	77
7:00 AM - 8:00 AM	80	67	147
8:00 AM - 9:00 AM	180	158	338
9:00 AM - 10:00 AM	229	243	472
10:00 AM - 11:00 AM	304	266	570
11:00 AM - 12:00 PM	385	385	770
Total	**1,491**	**1,340**	**2,831**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	457	335	792
1:00 PM - 2:00 PM	506	491	997
2:00 PM - 3:00 PM	455	337	792
3:00 PM - 4:00 PM	425	322	747
4:00 PM - 5:00 PM	442	279	721
5:00 PM - 6:00 PM	411	280	691
6:00 PM - 7:00 PM	361	260	621
7:00 PM - 8:00 PM	345	239	584
8:00 PM - 9:00 PM	252	227	479
9:00 PM - 10:00 PM	177	114	291
10:00 PM - 11:00 PM	136	86	222
11:00 PM - 12:00 AM	75	28	103
Total	**4,042**	**2,998**	**7,040**

24-Hour	*EB*	*Volume*	*5,533*	*24-Hour*	*WB*	*Volume*	*4,338*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

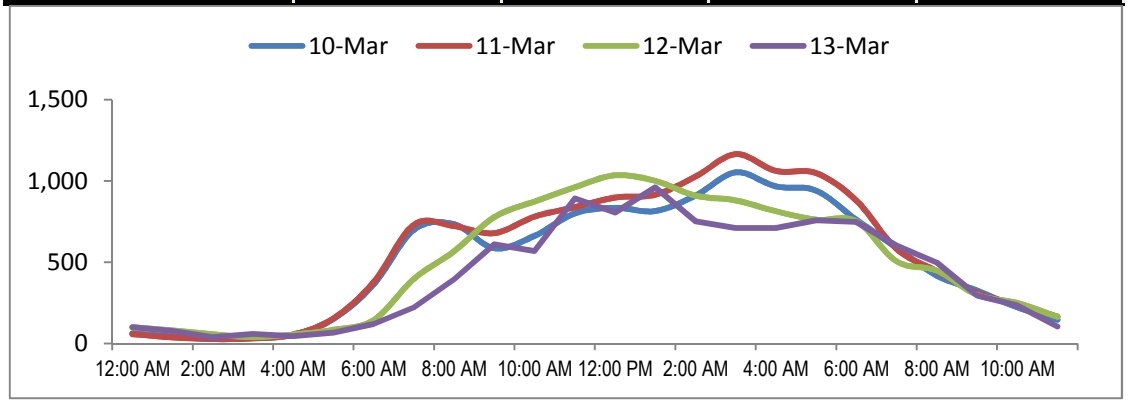
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location:	9. Broadway between Kempf St and Columbus Pl
Orientation:	*East-West*
Day 1	*Thursday, March 10, 2016*
Day 2	*Friday, March 11, 2016*
Day 3	*Saturday, March 12, 2016*
Day 4	*Sunday, March 13, 2016*
AVC Proj. No:	*16-0493*

Average Daily Traffic	***11,949***
Highest Daily Traffic	***13,238***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	63	58	100	101
1:00 AM - 2:00 AM	44	37	81	77
2:00 AM - 3:00 AM	27	30	57	40
3:00 AM - 4:00 AM	33	31	40	60
4:00 AM - 5:00 AM	54	55	56	46
5:00 AM - 6:00 AM	152	155	85	67
6:00 AM - 7:00 AM	364	378	145	120
7:00 AM - 8:00 AM	700	731	398	222
8:00 AM - 9:00 AM	734	722	568	396
9:00 AM - 10:00 AM	586	679	778	611
10:00 AM - 11:00 AM	663	781	874	570
11:00 AM - 12:00 PM	801	839	962	892
12:00 PM - 1:00 PM	835	898	1,035	805
1:00 PM - 2:00 PM	815	916	1,001	961
2:00 PM - 3:00 PM	910	1,027	910	753
3:00 PM - 4:00 PM	1,053	1,165	881	710
4:00 PM - 5:00 PM	967	1,062	814	711
5:00 PM - 6:00 PM	941	1,049	762	758
6:00 PM - 7:00 PM	761	880	753	749
7:00 PM - 8:00 PM	590	582	506	603
8:00 PM - 9:00 PM	418	446	448	498
9:00 PM - 10:00 PM	326	312	300	295
10:00 PM - 11:00 PM	223	239	250	234
11:00 PM - 12:00 AM	147	166	164	105
Total	**12,207**	**13,238**	**11,968**	**10,384**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 9. Broadway between Kempf St and Columbus Pl

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

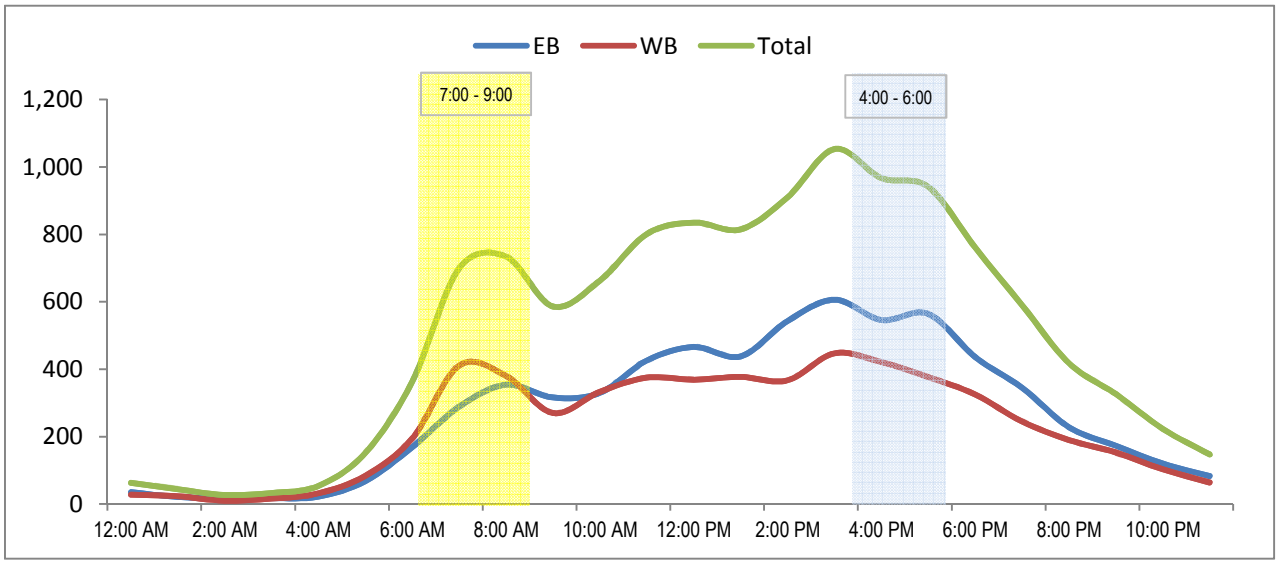
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*12,207*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	35	28	63
1:00 AM - 2:00 AM	21	23	44
2:00 AM - 3:00 AM	17	10	27
3:00 AM - 4:00 AM	17	16	33
4:00 AM - 5:00 AM	22	32	54
5:00 AM - 6:00 AM	68	84	152
6:00 AM - 7:00 AM	169	195	364
7:00 AM - 8:00 AM	289	411	700
8:00 AM - 9:00 AM	354	380	734
9:00 AM - 10:00 AM	316	270	586
10:00 AM - 11:00 AM	330	333	663
11:00 AM - 12:00 PM	426	375	801
Total	**2,064**	**2,157**	**4,221**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	466	369	835
1:00 PM - 2:00 PM	438	377	815
2:00 PM - 3:00 PM	543	367	910
3:00 PM - 4:00 PM	606	447	1,053
4:00 PM - 5:00 PM	546	421	967
5:00 PM - 6:00 PM	564	377	941
6:00 PM - 7:00 PM	436	325	761
7:00 PM - 8:00 PM	345	245	590
8:00 PM - 9:00 PM	228	190	418
9:00 PM - 10:00 PM	173	153	326
10:00 PM - 11:00 PM	120	103	223
11:00 PM - 12:00 AM	83	64	147
Total	**4,548**	**3,438**	**7,986**

24-Hour	*EB*	*Volume*	*6,612*	*24-Hour*	*WB*	*Volume*	*5,595*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 9. Broadway between Kempf St and Columbus Pl

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

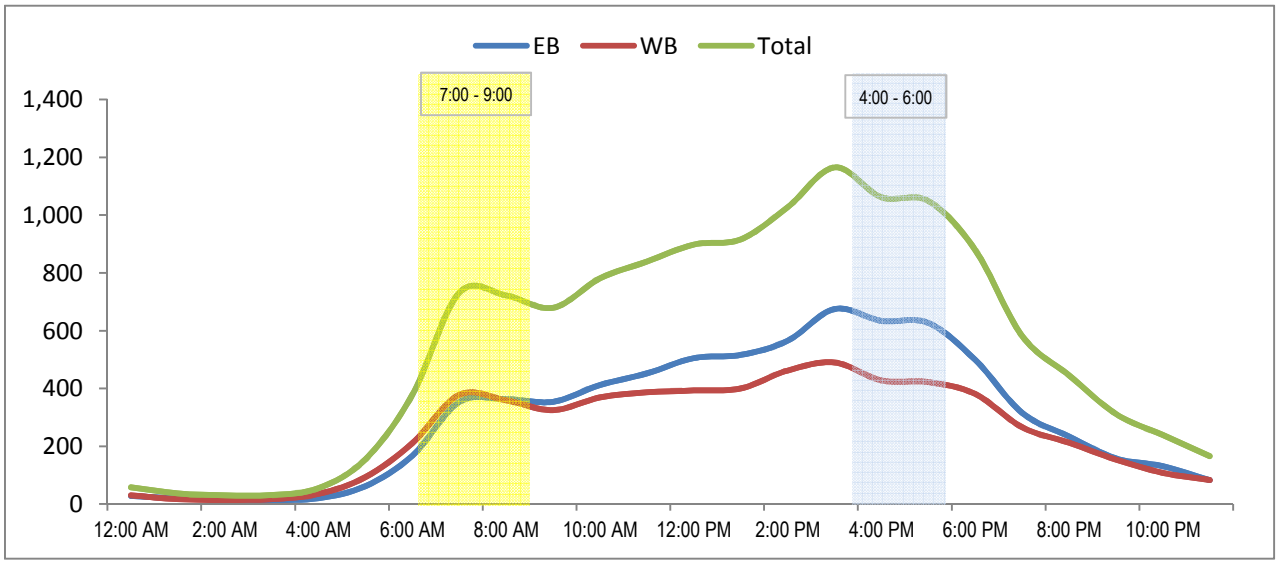
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*13,238*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	28	30	58
1:00 AM - 2:00 AM	20	17	37
2:00 AM - 3:00 AM	16	14	30
3:00 AM - 4:00 AM	14	17	31
4:00 AM - 5:00 AM	20	35	55
5:00 AM - 6:00 AM	62	93	155
6:00 AM - 7:00 AM	167	211	378
7:00 AM - 8:00 AM	353	378	731
8:00 AM - 9:00 AM	363	359	722
9:00 AM - 10:00 AM	354	325	679
10:00 AM - 11:00 AM	412	369	781
11:00 AM - 12:00 PM	452	387	839
Total	**2,261**	**2,235**	**4,496**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	505	393	898
1:00 PM - 2:00 PM	516	400	916
2:00 PM - 3:00 PM	565	462	1,027
3:00 PM - 4:00 PM	675	490	1,165
4:00 PM - 5:00 PM	634	428	1,062
5:00 PM - 6:00 PM	627	422	1,049
6:00 PM - 7:00 PM	499	381	880
7:00 PM - 8:00 PM	316	266	582
8:00 PM - 9:00 PM	234	212	446
9:00 PM - 10:00 PM	158	154	312
10:00 PM - 11:00 PM	131	108	239
11:00 PM - 12:00 AM	83	83	166
Total	**4,943**	**3,799**	**8,742**

24-Hour	*EB*	*Volume*	*7,204*	*24-Hour*	*WB*	*Volume*	*6,034*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 9. Broadway between Kempf St and Columbus Pl

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

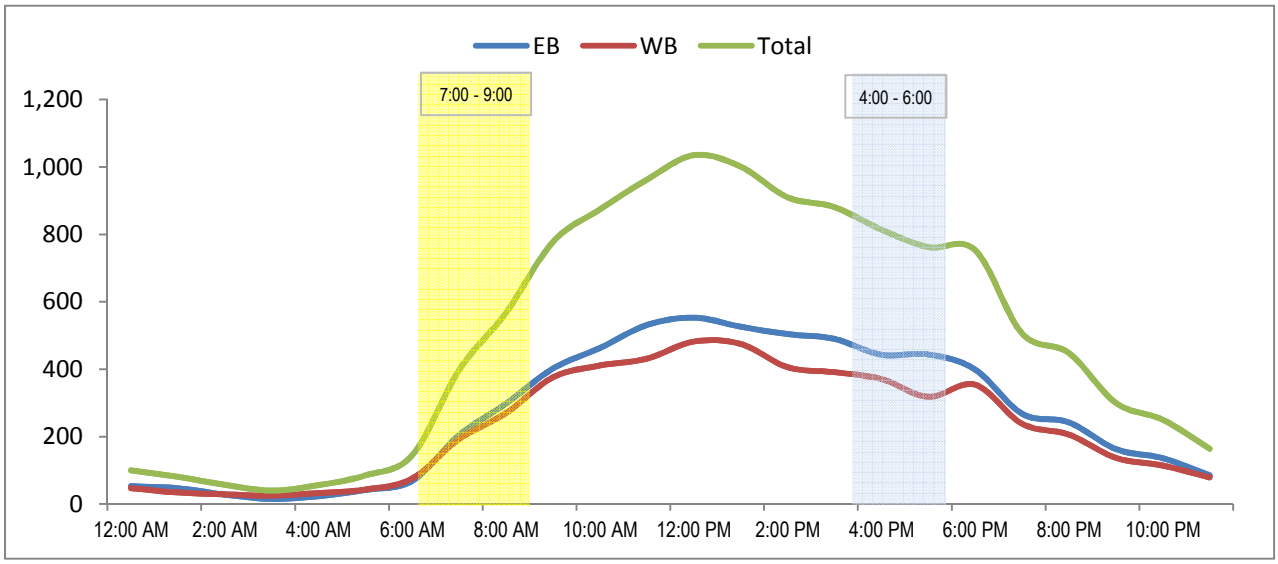
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***11,968***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	53	47	100
1:00 AM - 2:00 AM	47	34	81
2:00 AM - 3:00 AM	28	29	57
3:00 AM - 4:00 AM	15	25	40
4:00 AM - 5:00 AM	23	33	56
5:00 AM - 6:00 AM	42	43	85
6:00 AM - 7:00 AM	69	76	145
7:00 AM - 8:00 AM	205	193	398
8:00 AM - 9:00 AM	298	270	568
9:00 AM - 10:00 AM	402	376	778
10:00 AM - 11:00 AM	463	411	874
11:00 AM - 12:00 PM	531	431	962
Total	**2,176**	**1,968**	**4,144**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	553	482	1,035
1:00 PM - 2:00 PM	526	475	1,001
2:00 PM - 3:00 PM	504	406	910
3:00 PM - 4:00 PM	490	391	881
4:00 PM - 5:00 PM	443	371	814
5:00 PM - 6:00 PM	444	318	762
6:00 PM - 7:00 PM	399	354	753
7:00 PM - 8:00 PM	268	238	506
8:00 PM - 9:00 PM	242	206	448
9:00 PM - 10:00 PM	163	137	300
10:00 PM - 11:00 PM	136	114	250
11:00 PM - 12:00 AM	85	79	164
Total	**4,253**	**3,571**	**7,824**

24-Hour	***EB***	***Volume***	***6,429***	***24-Hour***	***WB***	***Volume***	***5,539***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 9. Broadway between Kempf St and Columbus Pl

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

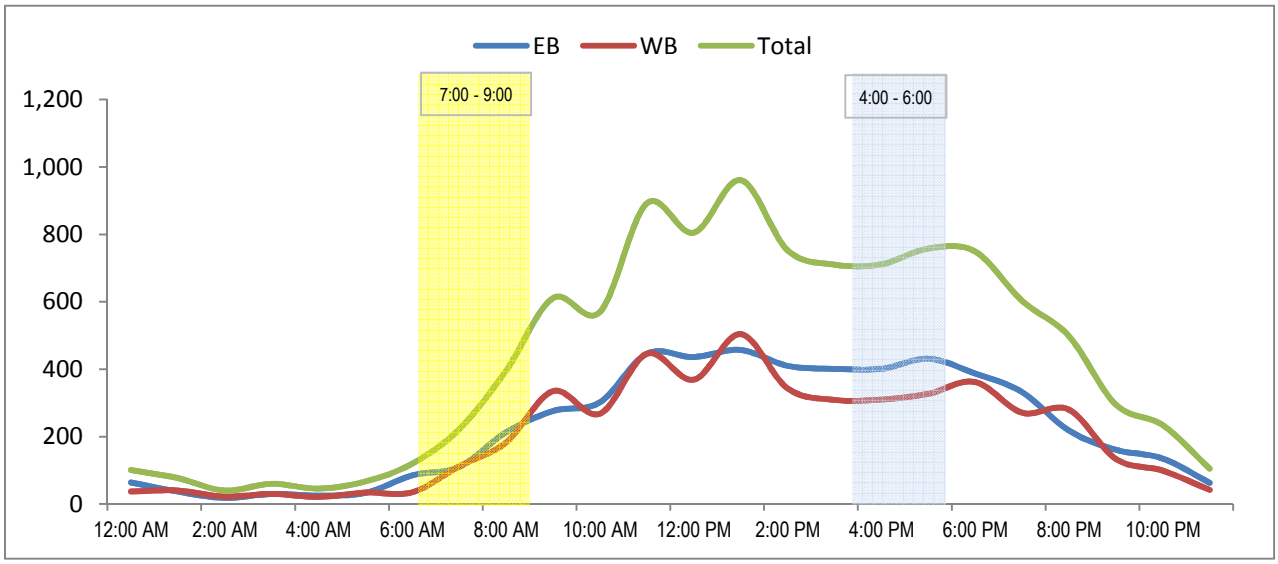
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*10,384*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	64	37	101
1:00 AM - 2:00 AM	37	40	77
2:00 AM - 3:00 AM	18	22	40
3:00 AM - 4:00 AM	30	30	60
4:00 AM - 5:00 AM	25	21	46
5:00 AM - 6:00 AM	33	34	67
6:00 AM - 7:00 AM	85	35	120
7:00 AM - 8:00 AM	110	112	222
8:00 AM - 9:00 AM	213	183	396
9:00 AM - 10:00 AM	276	335	611
10:00 AM - 11:00 AM	302	268	570
11:00 AM - 12:00 PM	446	446	892
Total	**1,639**	**1,563**	**3,202**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	436	369	805
1:00 PM - 2:00 PM	457	504	961
2:00 PM - 3:00 PM	410	343	753
3:00 PM - 4:00 PM	401	309	710
4:00 PM - 5:00 PM	401	310	711
5:00 PM - 6:00 PM	431	327	758
6:00 PM - 7:00 PM	387	362	749
7:00 PM - 8:00 PM	332	271	603
8:00 PM - 9:00 PM	218	280	498
9:00 PM - 10:00 PM	161	134	295
10:00 PM - 11:00 PM	135	99	234
11:00 PM - 12:00 AM	63	42	105
Total	**3,832**	**3,350**	**7,182**

24-Hour	*EB*	*Volume*	*5,471*	*24-Hour*	*WB*	*Volume*	*4,913*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

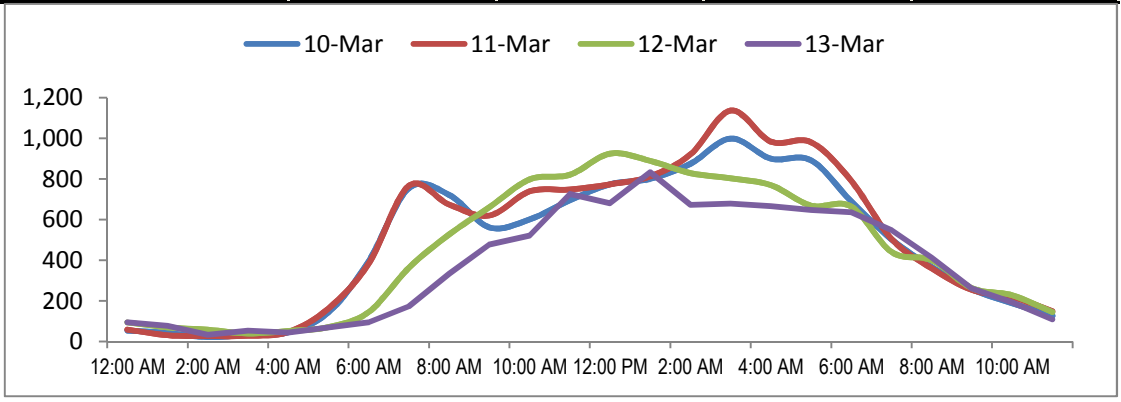
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 10. Broadway between Columbus Pl and Lemon Grove Way
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***10,847***
Highest Daily Traffic	***12,175***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	54	59	94	95
1:00 AM - 2:00 AM	42	31	70	77
2:00 AM - 3:00 AM	22	27	58	34
3:00 AM - 4:00 AM	33	28	40	54
4:00 AM - 5:00 AM	45	47	52	45
5:00 AM - 6:00 AM	144	163	71	69
6:00 AM - 7:00 AM	396	384	145	94
7:00 AM - 8:00 AM	755	767	363	173
8:00 AM - 9:00 AM	722	674	527	334
9:00 AM - 10:00 AM	562	620	661	478
10:00 AM - 11:00 AM	601	739	798	522
11:00 AM - 12:00 PM	695	748	821	727
12:00 PM - 1:00 PM	774	774	925	680
1:00 PM - 2:00 PM	801	813	889	834
2:00 PM - 3:00 PM	875	921	829	673
3:00 PM - 4:00 PM	999	1,137	803	679
4:00 PM - 5:00 PM	900	984	770	667
5:00 PM - 6:00 PM	892	981	669	648
6:00 PM - 7:00 PM	690	791	664	636
7:00 PM - 8:00 PM	503	505	441	549
8:00 PM - 9:00 PM	366	360	400	413
9:00 PM - 10:00 PM	257	254	263	260
10:00 PM - 11:00 PM	188	219	228	193
11:00 PM - 12:00 AM	127	149	145	109
Total	**11,443**	**12,175**	**10,726**	**9,043**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 10. Broadway between Columbus Pl and Lemon Grove Way

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

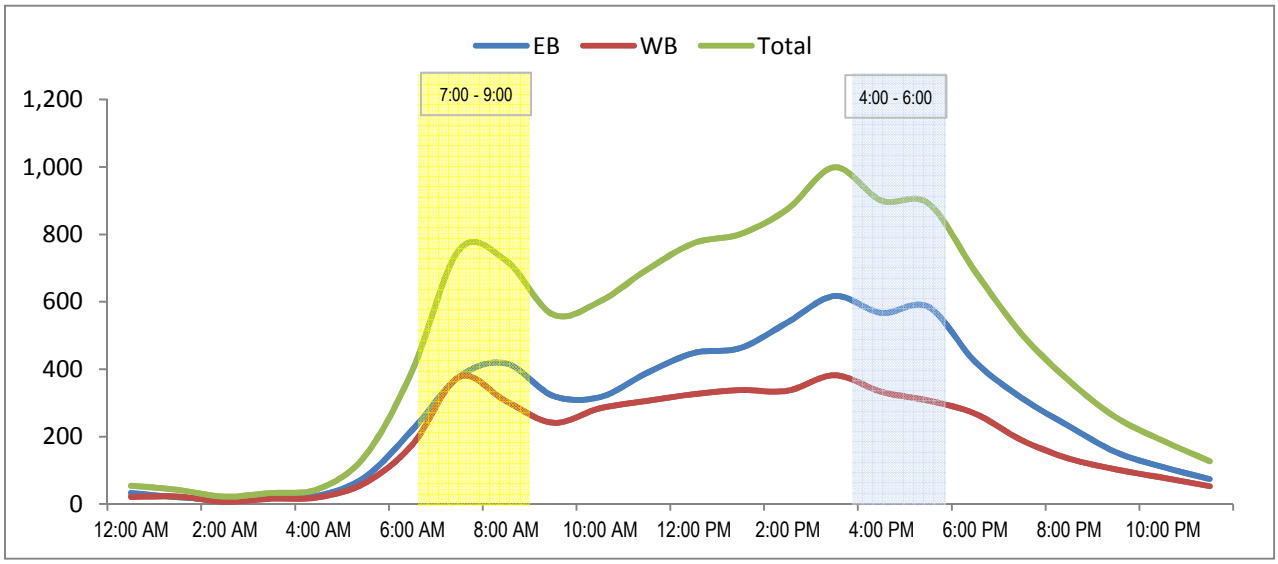
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*11,443*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	33	21	54
1:00 AM - 2:00 AM	20	22	42
2:00 AM - 3:00 AM	15	7	22
3:00 AM - 4:00 AM	17	16	33
4:00 AM - 5:00 AM	25	20	45
5:00 AM - 6:00 AM	81	63	144
6:00 AM - 7:00 AM	220	176	396
7:00 AM - 8:00 AM	378	377	755
8:00 AM - 9:00 AM	417	305	722
9:00 AM - 10:00 AM	321	241	562
10:00 AM - 11:00 AM	317	284	601
11:00 AM - 12:00 PM	389	306	695
Total	**2,233**	**1,838**	**4,071**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	448	326	774
1:00 PM - 2:00 PM	463	338	801
2:00 PM - 3:00 PM	539	336	875
3:00 PM - 4:00 PM	617	382	999
4:00 PM - 5:00 PM	567	333	900
5:00 PM - 6:00 PM	585	307	892
6:00 PM - 7:00 PM	422	268	690
7:00 PM - 8:00 PM	314	189	503
8:00 PM - 9:00 PM	231	135	366
9:00 PM - 10:00 PM	154	103	257
10:00 PM - 11:00 PM	110	78	188
11:00 PM - 12:00 AM	74	53	127
Total	**4,524**	**2,848**	**7,372**

24-Hour	*EB*	*Volume*	*6,757*	*24-Hour*	*WB*	*Volume*	*4,686*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 10. Broadway between Columbus Pl and Lemon Grove Way

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

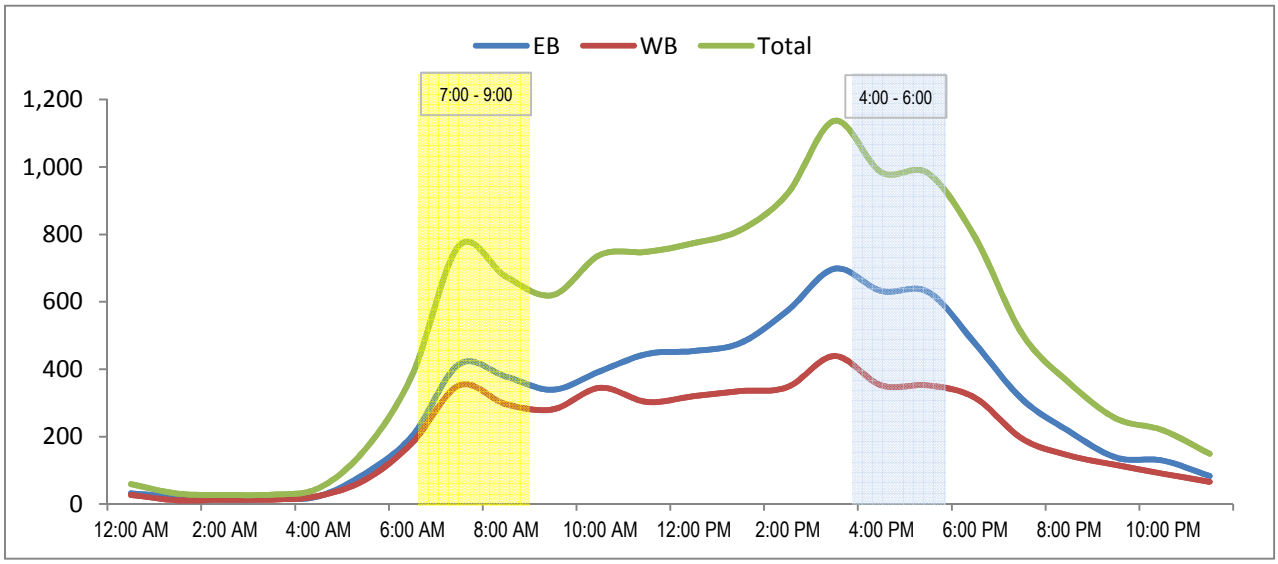
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***12,175***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	32	27	59
1:00 AM - 2:00 AM	20	11	31
2:00 AM - 3:00 AM	14	13	27
3:00 AM - 4:00 AM	15	13	28
4:00 AM - 5:00 AM	23	24	47
5:00 AM - 6:00 AM	91	72	163
6:00 AM - 7:00 AM	202	182	384
7:00 AM - 8:00 AM	415	352	767
8:00 AM - 9:00 AM	378	296	674
9:00 AM - 10:00 AM	339	281	620
10:00 AM - 11:00 AM	394	345	739
11:00 AM - 12:00 PM	445	303	748
Total	**2,368**	**1,919**	**4,287**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	454	320	774
1:00 PM - 2:00 PM	478	335	813
2:00 PM - 3:00 PM	574	347	921
3:00 PM - 4:00 PM	698	439	1,137
4:00 PM - 5:00 PM	632	352	984
5:00 PM - 6:00 PM	629	352	981
6:00 PM - 7:00 PM	476	315	791
7:00 PM - 8:00 PM	311	194	505
8:00 PM - 9:00 PM	216	144	360
9:00 PM - 10:00 PM	138	116	254
10:00 PM - 11:00 PM	129	90	219
11:00 PM - 12:00 AM	83	66	149
Total	**4,818**	**3,070**	**7,888**

24-Hour EB Volume	***7,186***	***24-Hour WB Volume***	***4,989***



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 10. Broadway between Columbus Pl and Lemon Grove Way

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

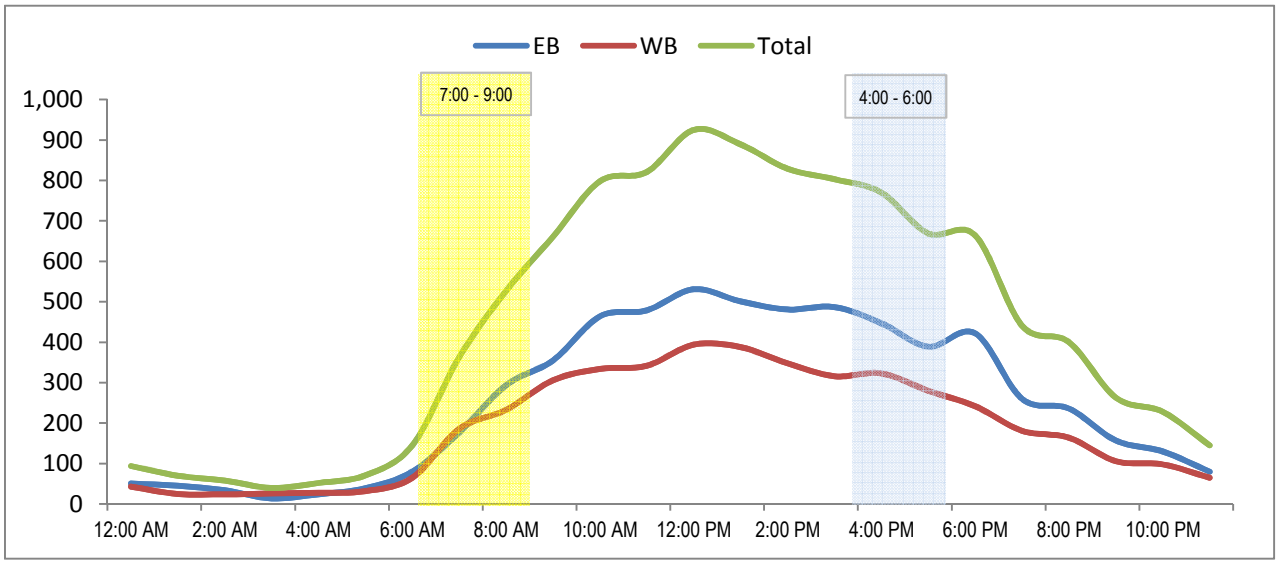
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*10,726*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	51	43	94
1:00 AM - 2:00 AM	45	25	70
2:00 AM - 3:00 AM	34	24	58
3:00 AM - 4:00 AM	14	26	40
4:00 AM - 5:00 AM	24	28	52
5:00 AM - 6:00 AM	39	32	71
6:00 AM - 7:00 AM	80	65	145
7:00 AM - 8:00 AM	177	186	363
8:00 AM - 9:00 AM	294	233	527
9:00 AM - 10:00 AM	355	306	661
10:00 AM - 11:00 AM	464	334	798
11:00 AM - 12:00 PM	479	342	821
Total	**2,056**	**1,644**	**3,700**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	531	394	925
1:00 PM - 2:00 PM	501	388	889
2:00 PM - 3:00 PM	481	348	829
3:00 PM - 4:00 PM	487	316	803
4:00 PM - 5:00 PM	447	323	770
5:00 PM - 6:00 PM	389	280	669
6:00 PM - 7:00 PM	422	242	664
7:00 PM - 8:00 PM	260	181	441
8:00 PM - 9:00 PM	236	164	400
9:00 PM - 10:00 PM	157	106	263
10:00 PM - 11:00 PM	130	98	228
11:00 PM - 12:00 AM	80	65	145
Total	**4,121**	**2,905**	**7,026**

24-Hour	*EB*	*Volume*	*6,177*	*24-Hour*	*WB*	*Volume*	*4,549*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 10. Broadway between Columbus Pl and Lemon Grove Way

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

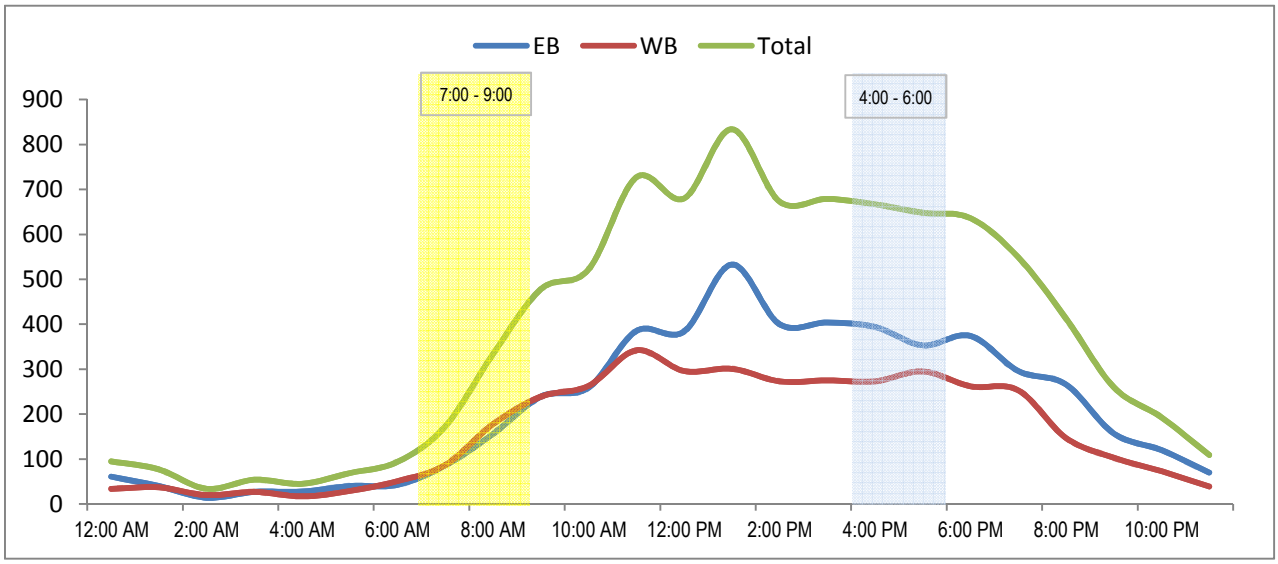
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*9,043*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	61	34	95
1:00 AM - 2:00 AM	40	37	77
2:00 AM - 3:00 AM	14	20	34
3:00 AM - 4:00 AM	27	27	54
4:00 AM - 5:00 AM	28	17	45
5:00 AM - 6:00 AM	40	29	69
6:00 AM - 7:00 AM	43	51	94
7:00 AM - 8:00 AM	86	87	173
8:00 AM - 9:00 AM	156	178	334
9:00 AM - 10:00 AM	239	239	478
10:00 AM - 11:00 AM	259	263	522
11:00 AM - 12:00 PM	385	342	727
Total	**1,378**	**1,324**	**2,702**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	384	296	680
1:00 PM - 2:00 PM	533	301	834
2:00 PM - 3:00 PM	400	273	673
3:00 PM - 4:00 PM	404	275	679
4:00 PM - 5:00 PM	394	273	667
5:00 PM - 6:00 PM	353	295	648
6:00 PM - 7:00 PM	374	262	636
7:00 PM - 8:00 PM	296	253	549
8:00 PM - 9:00 PM	266	147	413
9:00 PM - 10:00 PM	157	103	260
10:00 PM - 11:00 PM	120	73	193
11:00 PM - 12:00 AM	70	39	109
Total	**3,751**	**2,590**	**6,341**

24-Hour	*EB*	*Volume*	*5,129*	*24-Hour*	*WB*	*Volume*	*3,914*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

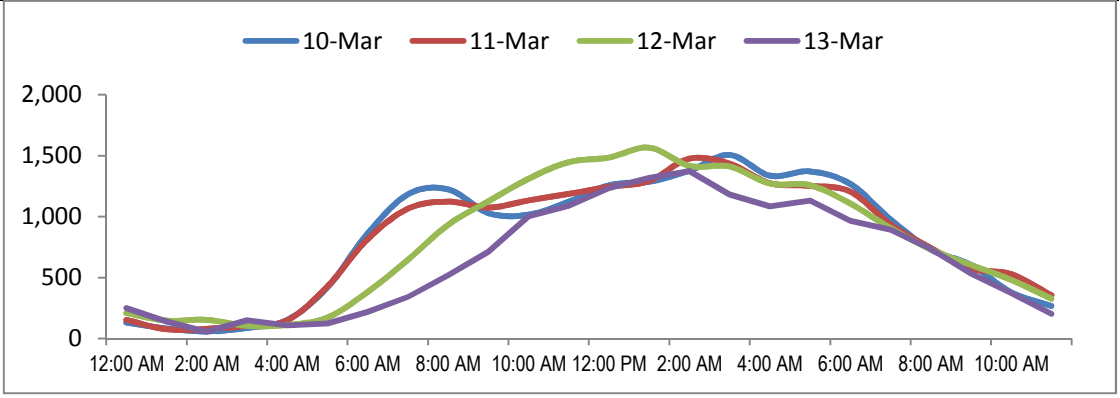
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 11. Lemon Grove Ave between Broadway and Lester Ave
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***18,621***
Highest Daily Traffic	***19,730***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	131	153	209	251
1:00 AM - 2:00 AM	83	76	148	140
2:00 AM - 3:00 AM	59	79	153	55
3:00 AM - 4:00 AM	88	104	105	150
4:00 AM - 5:00 AM	153	149	111	109
5:00 AM - 6:00 AM	420	428	172	124
6:00 AM - 7:00 AM	862	816	383	218
7:00 AM - 8:00 AM	1,183	1,065	646	341
8:00 AM - 9:00 AM	1,224	1,123	933	521
9:00 AM - 10:00 AM	1,029	1,074	1,126	712
10:00 AM - 11:00 AM	1,016	1,133	1,311	1,004
11:00 AM - 12:00 PM	1,122	1,187	1,447	1,089
12:00 PM - 1:00 PM	1,257	1,245	1,485	1,234
1:00 PM - 2:00 PM	1,287	1,293	1,566	1,319
2:00 PM - 3:00 PM	1,377	1,476	1,417	1,372
3:00 PM - 4:00 PM	1,506	1,434	1,411	1,182
4:00 PM - 5:00 PM	1,336	1,275	1,272	1,084
5:00 PM - 6:00 PM	1,371	1,253	1,258	1,132
6:00 PM - 7:00 PM	1,268	1,205	1,107	967
7:00 PM - 8:00 PM	977	936	906	892
8:00 PM - 9:00 PM	730	743	732	735
9:00 PM - 10:00 PM	605	573	604	532
10:00 PM - 11:00 PM	379	529	481	374
11:00 PM - 12:00 AM	267	355	327	203
Total	**19,730**	**19,704**	**19,310**	**15,740**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 11. Lemon Grove Ave between Broadway and Lester Ave

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

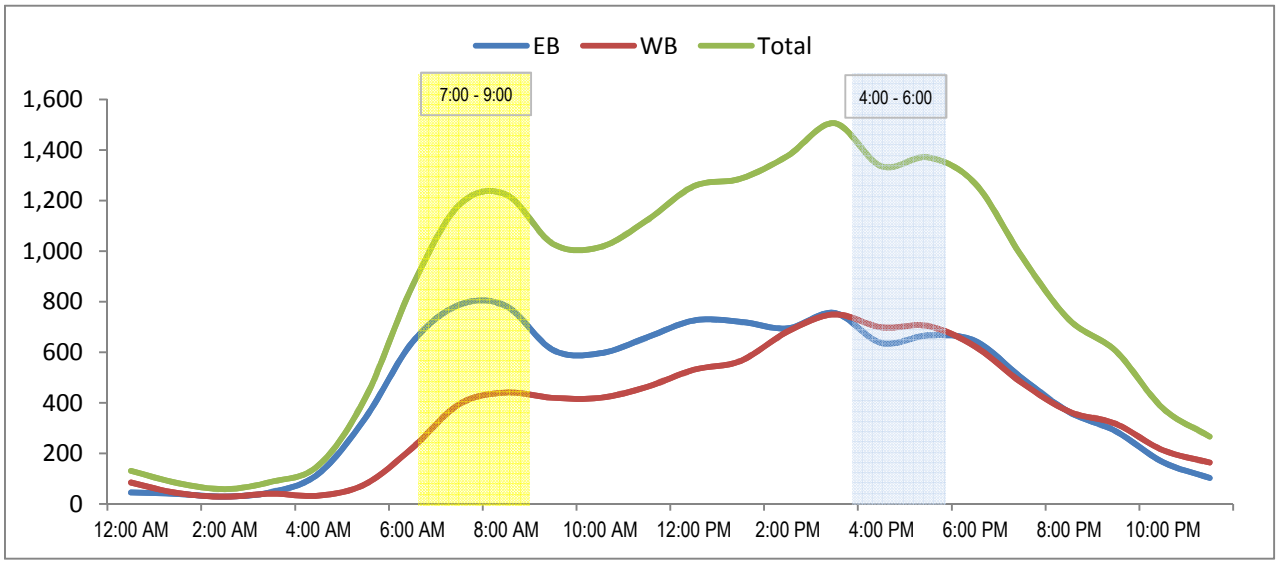
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,730*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	46	85	131
1:00 AM - 2:00 AM	40	43	83
2:00 AM - 3:00 AM	30	29	59
3:00 AM - 4:00 AM	47	41	88
4:00 AM - 5:00 AM	120	33	153
5:00 AM - 6:00 AM	341	79	420
6:00 AM - 7:00 AM	640	222	862
7:00 AM - 8:00 AM	788	395	1,183
8:00 AM - 9:00 AM	783	441	1,224
9:00 AM - 10:00 AM	609	420	1,029
10:00 AM - 11:00 AM	596	420	1,016
11:00 AM - 12:00 PM	659	463	1122
Total	**4,699**	**2,671**	**7,370**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	726	531	1,257
1:00 PM - 2:00 PM	721	566	1,287
2:00 PM - 3:00 PM	695	682	1,377
3:00 PM - 4:00 PM	756	750	1,506
4:00 PM - 5:00 PM	637	699	1,336
5:00 PM - 6:00 PM	667	704	1,371
6:00 PM - 7:00 PM	645	623	1,268
7:00 PM - 8:00 PM	498	479	977
8:00 PM - 9:00 PM	364	366	730
9:00 PM - 10:00 PM	288	317	605
10:00 PM - 11:00 PM	166	213	379
11:00 PM - 12:00 AM	103	164	267
Total	**6,266**	**6,094**	**12,360**

24-Hour	*EB*	*Volume*	*10,965*	*24-Hour*	*WB*	*Volume*	*8,765*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 11. Lemon Grove Ave between Broadway and Lester Ave

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

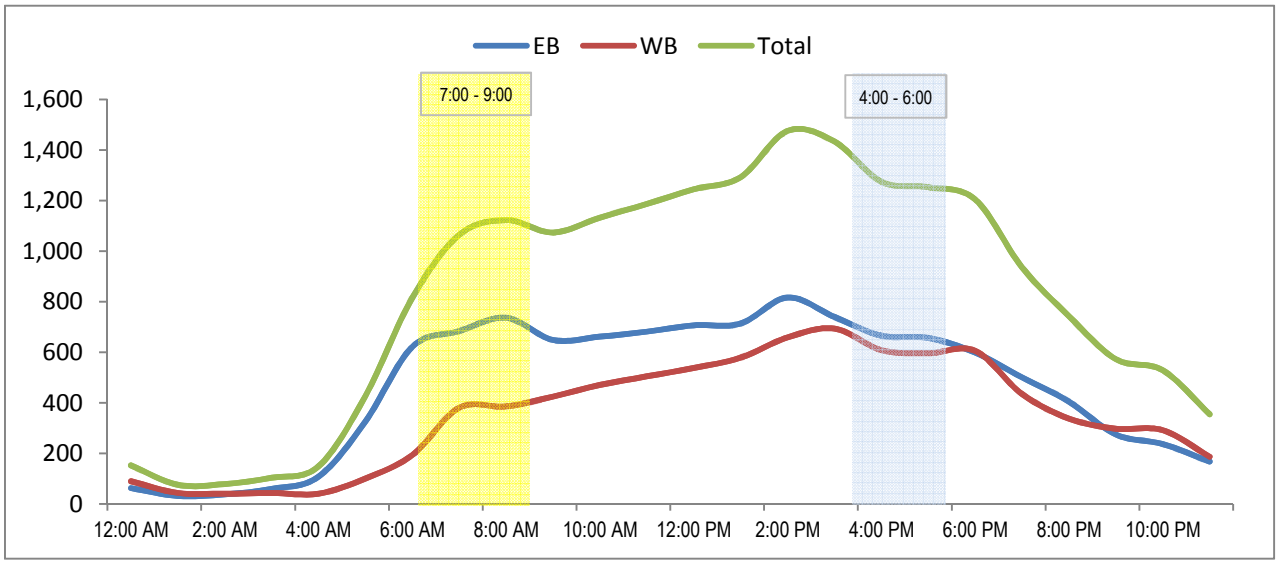
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,704*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	63	90	153
1:00 AM - 2:00 AM	32	44	76
2:00 AM - 3:00 AM	38	41	79
3:00 AM - 4:00 AM	60	44	104
4:00 AM - 5:00 AM	108	41	149
5:00 AM - 6:00 AM	327	101	428
6:00 AM - 7:00 AM	622	194	816
7:00 AM - 8:00 AM	684	381	1,065
8:00 AM - 9:00 AM	737	386	1,123
9:00 AM - 10:00 AM	649	425	1,074
10:00 AM - 11:00 AM	662	471	1,133
11:00 AM - 12:00 PM	682	505	1187
Total	**4,664**	**2,723**	**7,387**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	707	538	1,245
1:00 PM - 2:00 PM	714	579	1,293
2:00 PM - 3:00 PM	817	659	1,476
3:00 PM - 4:00 PM	740	694	1,434
4:00 PM - 5:00 PM	666	609	1,275
5:00 PM - 6:00 PM	657	596	1,253
6:00 PM - 7:00 PM	599	606	1,205
7:00 PM - 8:00 PM	501	435	936
8:00 PM - 9:00 PM	405	338	743
9:00 PM - 10:00 PM	275	298	573
10:00 PM - 11:00 PM	237	292	529
11:00 PM - 12:00 AM	168	187	355
Total	**6,486**	**5,831**	**12,317**

24-Hour	*EB*	*Volume*	*11,150*	*24-Hour*	*WB*	*Volume*	*8,554*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 11. Lemon Grove Ave between Broadway and Lester Ave

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

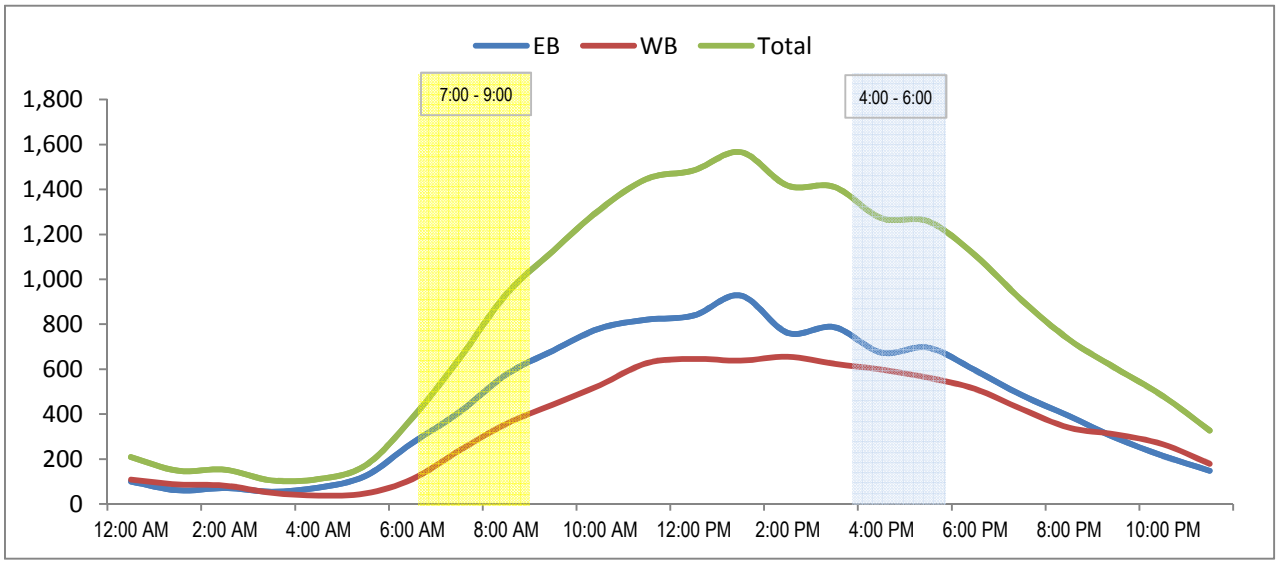
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*19,310*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	100	109	209
1:00 AM - 2:00 AM	61	87	148
2:00 AM - 3:00 AM	71	82	153
3:00 AM - 4:00 AM	55	50	105
4:00 AM - 5:00 AM	73	38	111
5:00 AM - 6:00 AM	125	47	172
6:00 AM - 7:00 AM	272	111	383
7:00 AM - 8:00 AM	408	238	646
8:00 AM - 9:00 AM	576	357	933
9:00 AM - 10:00 AM	683	443	1,126
10:00 AM - 11:00 AM	782	529	1,311
11:00 AM - 12:00 PM	820	627	1447
Total	**4,026**	**2,718**	**6,744**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	839	646	1,485
1:00 PM - 2:00 PM	928	638	1,566
2:00 PM - 3:00 PM	762	655	1,417
3:00 PM - 4:00 PM	787	624	1,411
4:00 PM - 5:00 PM	674	598	1,272
5:00 PM - 6:00 PM	696	562	1,258
6:00 PM - 7:00 PM	595	512	1,107
7:00 PM - 8:00 PM	484	422	906
8:00 PM - 9:00 PM	392	340	732
9:00 PM - 10:00 PM	294	310	604
10:00 PM - 11:00 PM	215	266	481
11:00 PM - 12:00 AM	148	179	327
Total	**6,814**	**5,752**	**12,566**

24-Hour	*EB*	*Volume*	*10,840*	*24-Hour*	*WB*	*Volume*	*8,470*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 11. Lemon Grove Ave between Broadway and Lester Ave

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

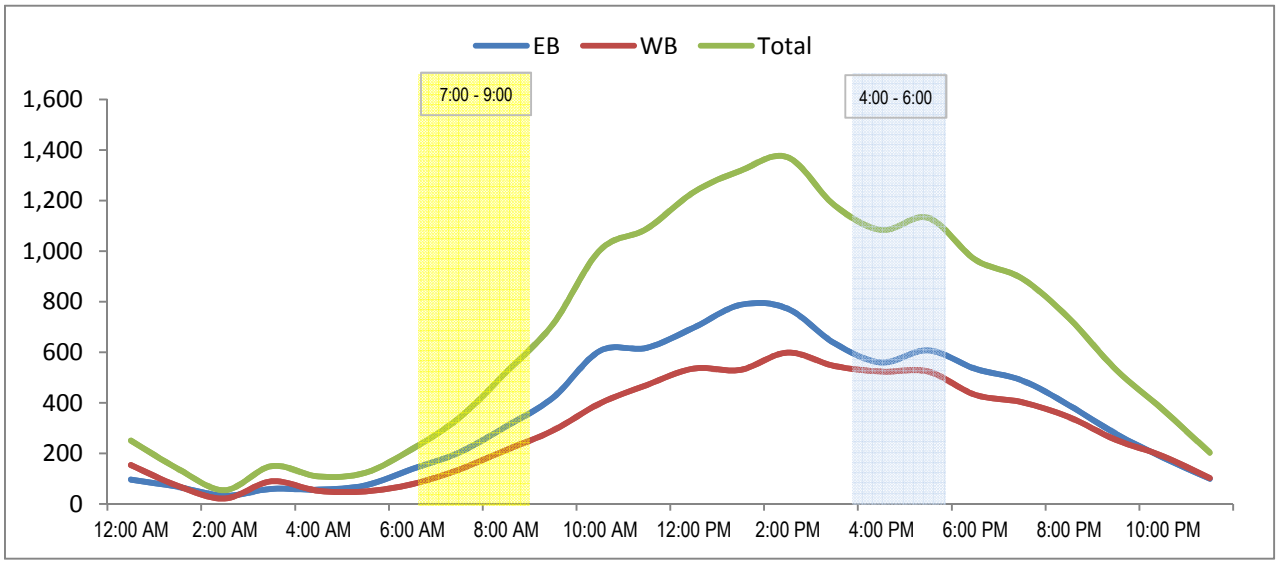
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*15,740*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	97	154	251
1:00 AM - 2:00 AM	68	72	140
2:00 AM - 3:00 AM	33	22	55
3:00 AM - 4:00 AM	60	90	150
4:00 AM - 5:00 AM	57	52	109
5:00 AM - 6:00 AM	74	50	124
6:00 AM - 7:00 AM	139	79	218
7:00 AM - 8:00 AM	204	137	341
8:00 AM - 9:00 AM	307	214	521
9:00 AM - 10:00 AM	421	291	712
10:00 AM - 11:00 AM	606	398	1,004
11:00 AM - 12:00 PM	618	471	1089
Total	**2,684**	**2,030**	**4,714**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	698	536	1,234
1:00 PM - 2:00 PM	788	531	1,319
2:00 PM - 3:00 PM	773	599	1,372
3:00 PM - 4:00 PM	636	546	1,182
4:00 PM - 5:00 PM	560	524	1,084
5:00 PM - 6:00 PM	608	524	1,132
6:00 PM - 7:00 PM	535	432	967
7:00 PM - 8:00 PM	489	403	892
8:00 PM - 9:00 PM	391	344	735
9:00 PM - 10:00 PM	278	254	532
10:00 PM - 11:00 PM	184	190	374
11:00 PM - 12:00 AM	100	103	203
Total	**6,040**	**4,986**	**11,026**

24-Hour	*EB*	*Volume*	*8,724*	*24-Hour*	*WB*	*Volume*	*7,016*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

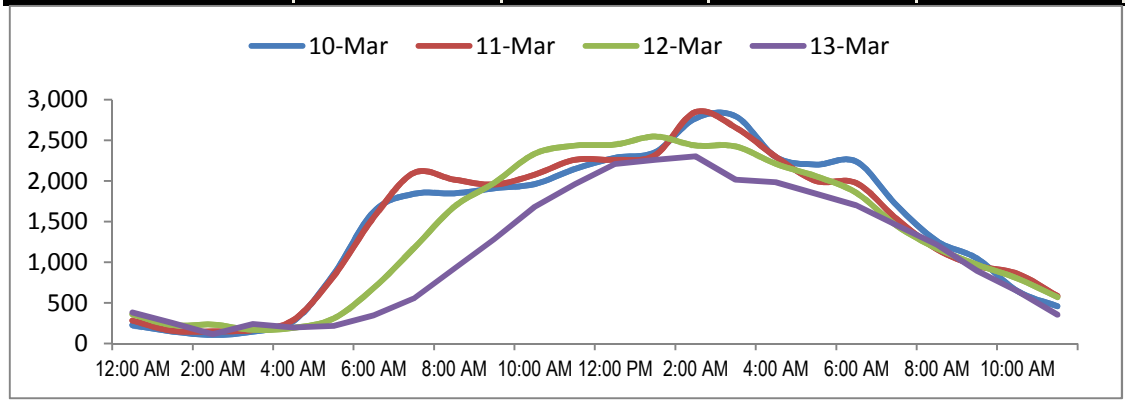
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 12. Lemon Grove Ave between North Ave and SR-94 Eastbound Ramps
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***32,553***
Highest Daily Traffic	***35,296***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	226	283	359	384
1:00 AM - 2:00 AM	147	157	227	252
2:00 AM - 3:00 AM	106	151	234	116
3:00 AM - 4:00 AM	147	167	168	242
4:00 AM - 5:00 AM	274	290	193	196
5:00 AM - 6:00 AM	851	825	308	216
6:00 AM - 7:00 AM	1,623	1,552	683	348
7:00 AM - 8:00 AM	1,842	2,100	1,172	554
8:00 AM - 9:00 AM	1,848	2,017	1,683	921
9:00 AM - 10:00 AM	1,911	1,957	1,978	1,283
10:00 AM - 11:00 AM	1,962	2,078	2,334	1,680
11:00 AM - 12:00 PM	2,147	2,260	2,436	1,963
12:00 PM - 1:00 PM	2,286	2,261	2,448	2,210
1:00 PM - 2:00 PM	2,356	2,320	2,547	2,261
2:00 PM - 3:00 PM	2,770	2,849	2,437	2,303
3:00 PM - 4:00 PM	2,796	2,657	2,425	2,017
4:00 PM - 5:00 PM	2,296	2,298	2,211	1,985
5:00 PM - 6:00 PM	2,203	2,000	2,058	1,845
6:00 PM - 7:00 PM	2,239	1,974	1,854	1,700
7:00 PM - 8:00 PM	1,701	1,535	1,450	1,458
8:00 PM - 9:00 PM	1,262	1,161	1,172	1,218
9:00 PM - 10:00 PM	1,047	957	971	896
10:00 PM - 11:00 PM	647	861	802	645
11:00 PM - 12:00 AM	459	586	570	355
Total	**35,146**	**35,296**	**32,720**	**27,048**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 12. Lemon Grove Ave between North Ave and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

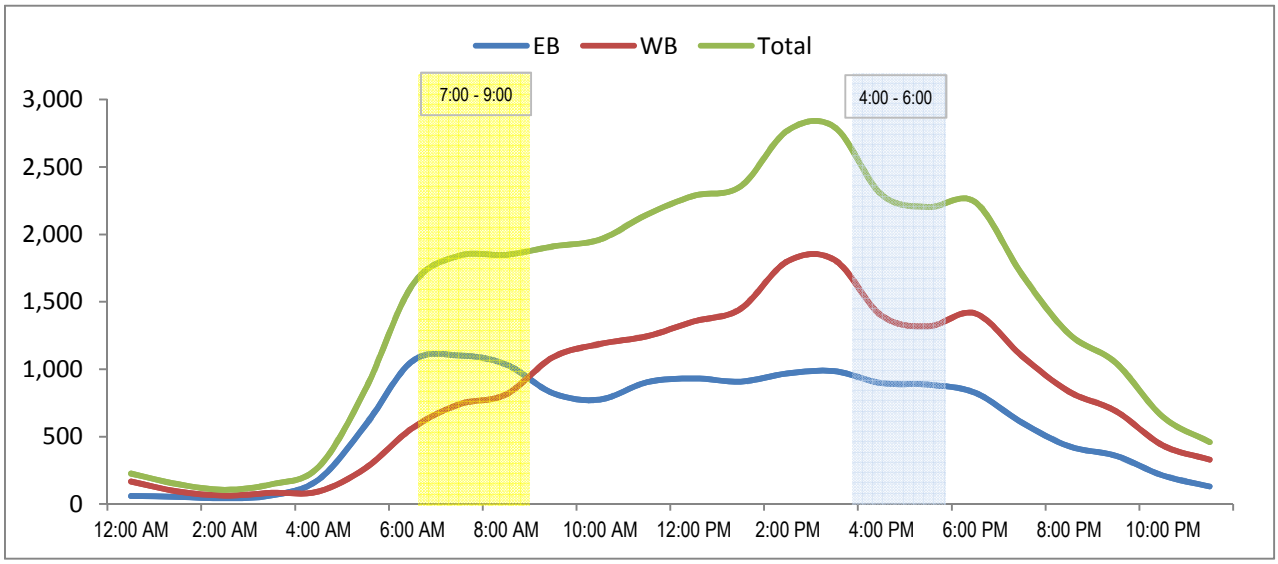
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*35,146*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	59	167	226
1:00 AM - 2:00 AM	54	93	147
2:00 AM - 3:00 AM	43	63	106
3:00 AM - 4:00 AM	64	83	147
4:00 AM - 5:00 AM	181	93	274
5:00 AM - 6:00 AM	585	266	851
6:00 AM - 7:00 AM	1,060	563	1,623
7:00 AM - 8:00 AM	1,102	740	1,842
8:00 AM - 9:00 AM	1,035	813	1,848
9:00 AM - 10:00 AM	822	1,089	1,911
10:00 AM - 11:00 AM	775	1,187	1,962
11:00 AM - 12:00 PM	903	1,244	2147
Total	**6,683**	**6,401**	**13,084**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	932	1,354	2,286
1:00 PM - 2:00 PM	908	1,448	2,356
2:00 PM - 3:00 PM	969	1,801	2,770
3:00 PM - 4:00 PM	985	1,811	2,796
4:00 PM - 5:00 PM	897	1,399	2,296
5:00 PM - 6:00 PM	885	1,318	2,203
6:00 PM - 7:00 PM	825	1,414	2,239
7:00 PM - 8:00 PM	604	1,097	1,701
8:00 PM - 9:00 PM	428	834	1,262
9:00 PM - 10:00 PM	358	689	1,047
10:00 PM - 11:00 PM	212	435	647
11:00 PM - 12:00 AM	130	329	459
Total	**8,133**	**13,929**	**22,062**

24-Hour	*EB*	*Volume*	*14,816*	*24-Hour*	*WB*	*Volume*	*20,330*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 12. Lemon Grove Ave between North Ave and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

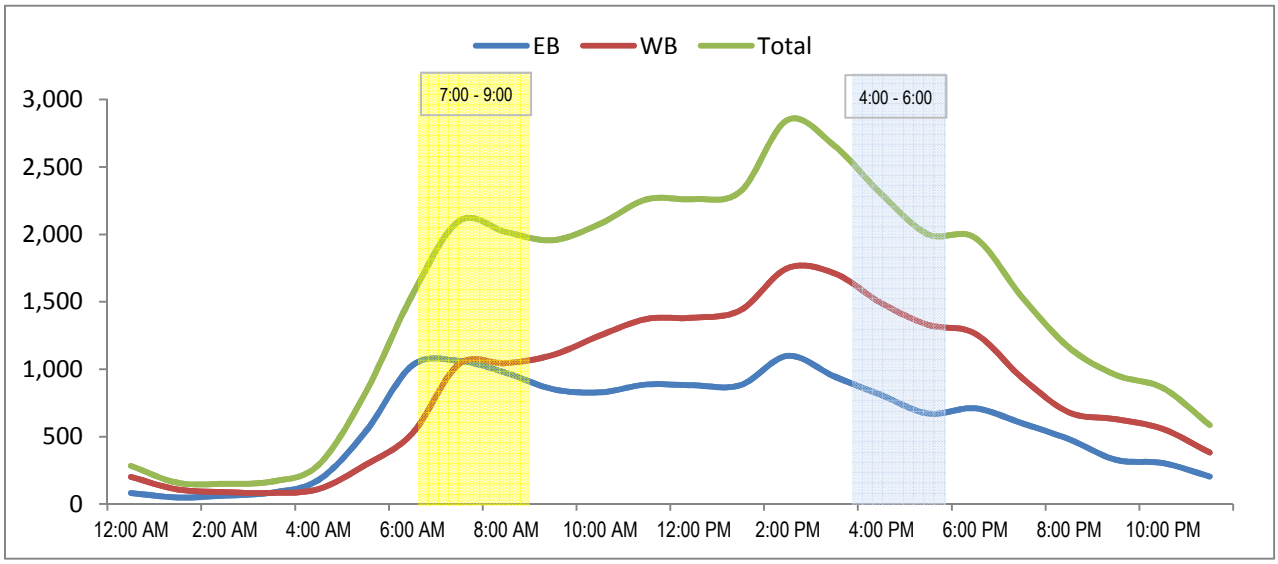
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*35,296*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	82	201	283
1:00 AM - 2:00 AM	49	108	157
2:00 AM - 3:00 AM	62	89	151
3:00 AM - 4:00 AM	85	82	167
4:00 AM - 5:00 AM	179	111	290
5:00 AM - 6:00 AM	535	290	825
6:00 AM - 7:00 AM	1,028	524	1,552
7:00 AM - 8:00 AM	1,061	1,039	2,100
8:00 AM - 9:00 AM	973	1,044	2,017
9:00 AM - 10:00 AM	852	1,105	1,957
10:00 AM - 11:00 AM	828	1,250	2,078
11:00 AM - 12:00 PM	887	1,373	2260
Total	**6,621**	**7,216**	**13,837**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	880	1,381	2,261
1:00 PM - 2:00 PM	882	1,438	2,320
2:00 PM - 3:00 PM	1,099	1,750	2,849
3:00 PM - 4:00 PM	946	1,711	2,657
4:00 PM - 5:00 PM	808	1,490	2,298
5:00 PM - 6:00 PM	671	1,329	2,000
6:00 PM - 7:00 PM	710	1,264	1,974
7:00 PM - 8:00 PM	599	936	1,535
8:00 PM - 9:00 PM	481	680	1,161
9:00 PM - 10:00 PM	328	629	957
10:00 PM - 11:00 PM	304	557	861
11:00 PM - 12:00 AM	204	382	586
Total	**7,912**	**13,547**	**21,459**

24-Hour	*EB*	*Volume*	*14,533*	*24-Hour*	*WB*	*Volume*	*20,763*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 12. Lemon Grove Ave between North Ave and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

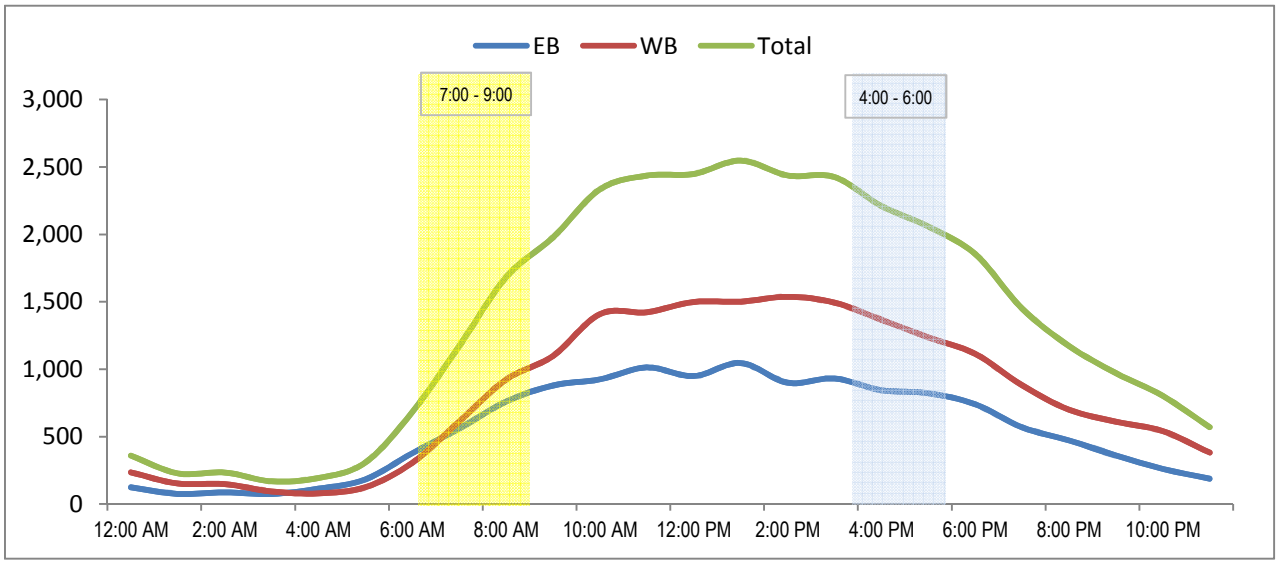
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*32,720*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	124	235	359
1:00 AM - 2:00 AM	75	152	227
2:00 AM - 3:00 AM	86	148	234
3:00 AM - 4:00 AM	75	93	168
4:00 AM - 5:00 AM	114	79	193
5:00 AM - 6:00 AM	183	125	308
6:00 AM - 7:00 AM	377	306	683
7:00 AM - 8:00 AM	560	612	1,172
8:00 AM - 9:00 AM	760	923	1,683
9:00 AM - 10:00 AM	879	1,099	1,978
10:00 AM - 11:00 AM	925	1,409	2,334
11:00 AM - 12:00 PM	1,013	1,423	2436
Total	**5,171**	**6,604**	**11,775**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	949	1,499	2,448
1:00 PM - 2:00 PM	1,046	1,501	2,547
2:00 PM - 3:00 PM	900	1,537	2,437
3:00 PM - 4:00 PM	931	1,494	2,425
4:00 PM - 5:00 PM	844	1,367	2,211
5:00 PM - 6:00 PM	822	1,236	2,058
6:00 PM - 7:00 PM	740	1,114	1,854
7:00 PM - 8:00 PM	569	881	1,450
8:00 PM - 9:00 PM	472	700	1,172
9:00 PM - 10:00 PM	360	611	971
10:00 PM - 11:00 PM	261	541	802
11:00 PM - 12:00 AM	188	382	570
Total	**8,082**	**12,863**	**20,945**

24-Hour	*EB*	*Volume*	*13,253*	*24-Hour*	*WB*	*Volume*	*19,467*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 12. Lemon Grove Ave between North Ave and SR-94 Eastbound Ramps

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

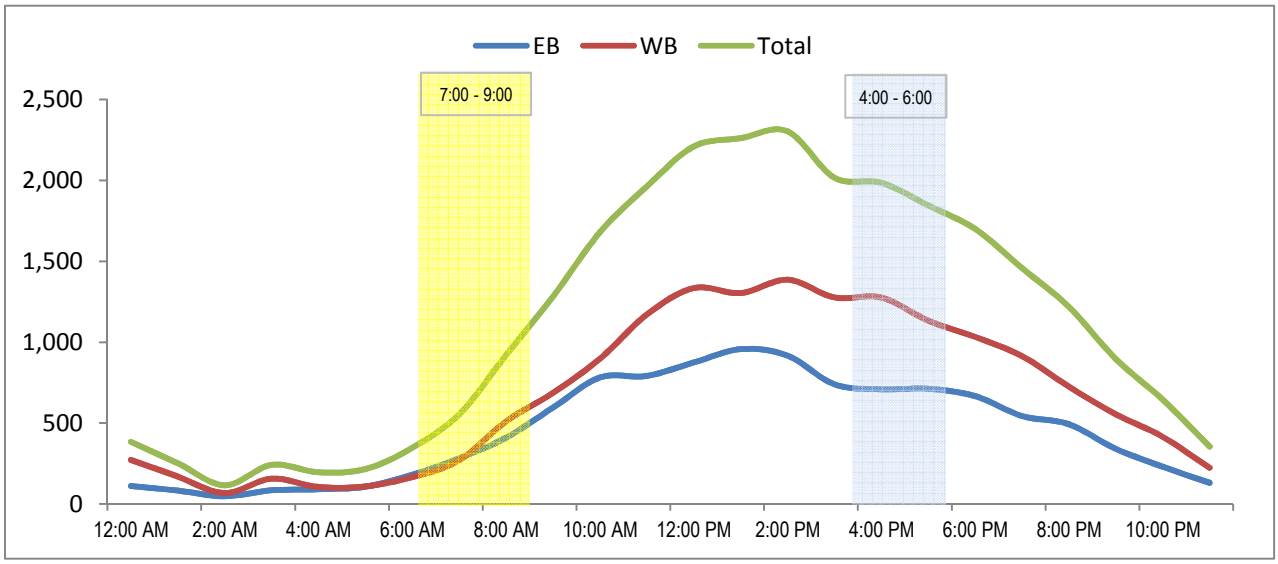
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*27,048*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	111	273	384
1:00 AM - 2:00 AM	83	169	252
2:00 AM - 3:00 AM	48	68	116
3:00 AM - 4:00 AM	85	157	242
4:00 AM - 5:00 AM	91	105	196
5:00 AM - 6:00 AM	107	109	216
6:00 AM - 7:00 AM	181	167	348
7:00 AM - 8:00 AM	283	271	554
8:00 AM - 9:00 AM	410	511	921
9:00 AM - 10:00 AM	596	687	1,283
10:00 AM - 11:00 AM	782	898	1,680
11:00 AM - 12:00 PM	792	1,171	1963
Total	**3,569**	**4,586**	**8,155**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	875	1,335	2,210
1:00 PM - 2:00 PM	957	1,304	2,261
2:00 PM - 3:00 PM	917	1,386	2,303
3:00 PM - 4:00 PM	740	1,277	2,017
4:00 PM - 5:00 PM	709	1,276	1,985
5:00 PM - 6:00 PM	712	1,133	1,845
6:00 PM - 7:00 PM	667	1,033	1,700
7:00 PM - 8:00 PM	544	914	1,458
8:00 PM - 9:00 PM	493	725	1,218
9:00 PM - 10:00 PM	341	555	896
10:00 PM - 11:00 PM	230	415	645
11:00 PM - 12:00 AM	131	224	355
Total	**7,316**	**11,577**	**18,893**

24-Hour	*EB*	*Volume*	*10,885*	*24-Hour*	*WB*	*Volume*	*16,163*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

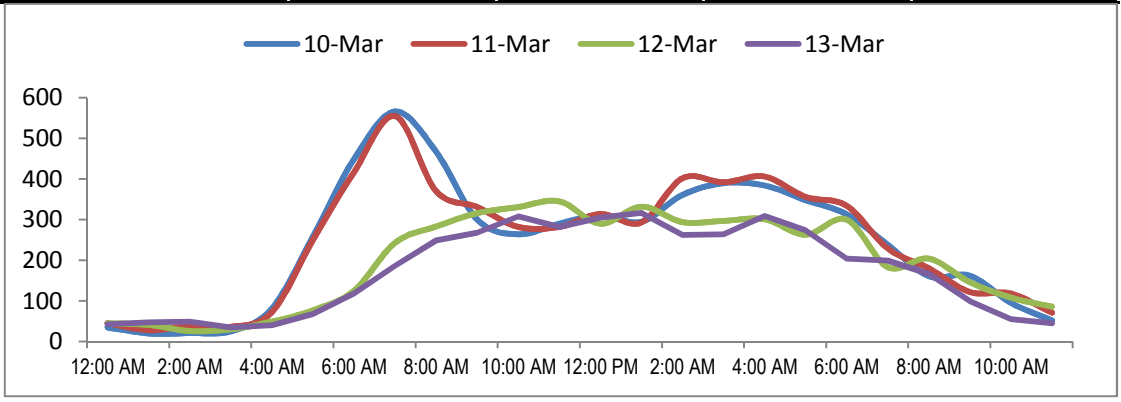
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 13. Lemon Grove Way between North Ave and Grove St
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***5,179***
Highest Daily Traffic	***5,923***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	35	45	45	43
1:00 AM - 2:00 AM	20	28	41	47
2:00 AM - 3:00 AM	21	38	26	49
3:00 AM - 4:00 AM	25	36	30	35
4:00 AM - 5:00 AM	81	72	49	40
5:00 AM - 6:00 AM	258	250	77	68
6:00 AM - 7:00 AM	449	417	125	118
7:00 AM - 8:00 AM	566	555	243	187
8:00 AM - 9:00 AM	467	370	283	249
9:00 AM - 10:00 AM	300	331	316	268
10:00 AM - 11:00 AM	264	282	331	308
11:00 AM - 12:00 PM	290	282	345	282
12:00 PM - 1:00 PM	310	314	290	305
1:00 PM - 2:00 PM	295	293	332	317
2:00 PM - 3:00 PM	361	402	294	262
3:00 PM - 4:00 PM	390	392	297	264
4:00 PM - 5:00 PM	384	406	301	309
5:00 PM - 6:00 PM	348	356	263	273
6:00 PM - 7:00 PM	313	334	300	204
7:00 PM - 8:00 PM	238	229	183	199
8:00 PM - 9:00 PM	161	180	204	166
9:00 PM - 10:00 PM	162	122	146	99
10:00 PM - 11:00 PM	95	118	108	55
11:00 PM - 12:00 AM	52	71	86	45
Total	**5,885**	**5,923**	**4,715**	**4,192**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 13. Lemon Grove Way between North Ave and Grove St

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

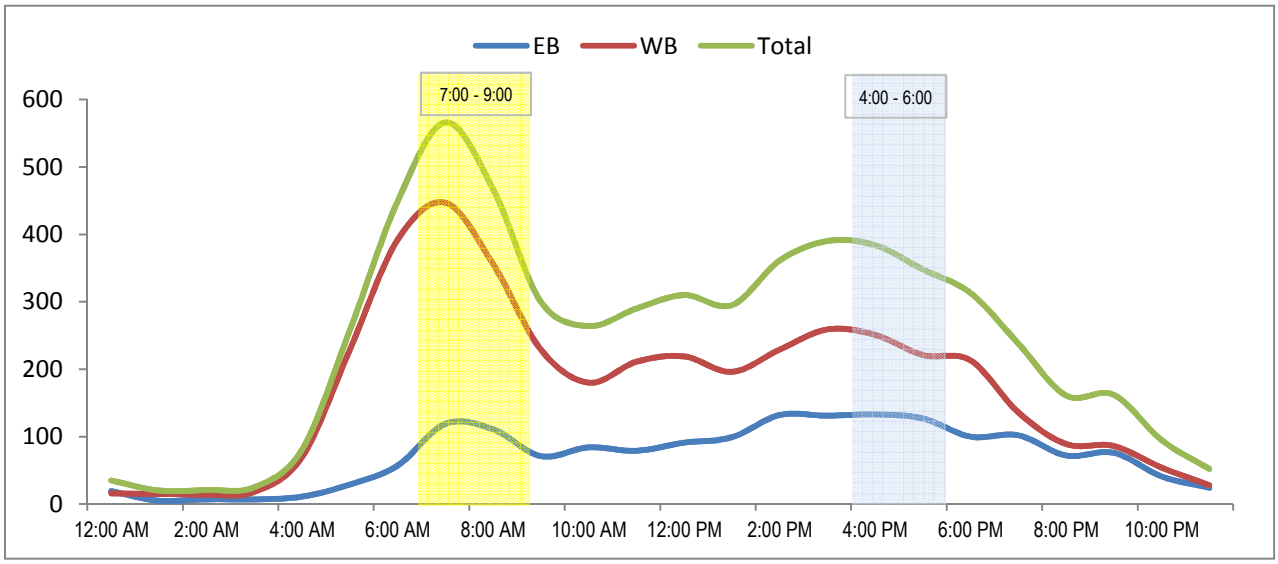
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,885*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	19	16	35
1:00 AM - 2:00 AM	5	15	20
2:00 AM - 3:00 AM	7	14	21
3:00 AM - 4:00 AM	7	18	25
4:00 AM - 5:00 AM	11	70	81
5:00 AM - 6:00 AM	29	229	258
6:00 AM - 7:00 AM	57	392	449
7:00 AM - 8:00 AM	119	447	566
8:00 AM - 9:00 AM	111	356	467
9:00 AM - 10:00 AM	71	229	300
10:00 AM - 11:00 AM	84	180	264
11:00 AM - 12:00 PM	79	211	290
Total	**599**	**2,177**	**2,776**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	91	219	310
1:00 PM - 2:00 PM	99	196	295
2:00 PM - 3:00 PM	132	229	361
3:00 PM - 4:00 PM	131	259	390
4:00 PM - 5:00 PM	133	251	384
5:00 PM - 6:00 PM	127	221	348
6:00 PM - 7:00 PM	100	213	313
7:00 PM - 8:00 PM	102	136	238
8:00 PM - 9:00 PM	72	89	161
9:00 PM - 10:00 PM	76	86	162
10:00 PM - 11:00 PM	41	54	95
11:00 PM - 12:00 AM	24	28	52
Total	**1,128**	**1,981**	**3,109**

24-Hour	*EB*	*Volume*	*1,727*	*24-Hour*	*WB*	*Volume*	*4,158*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 13. Lemon Grove Way between North Ave and Grove St

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

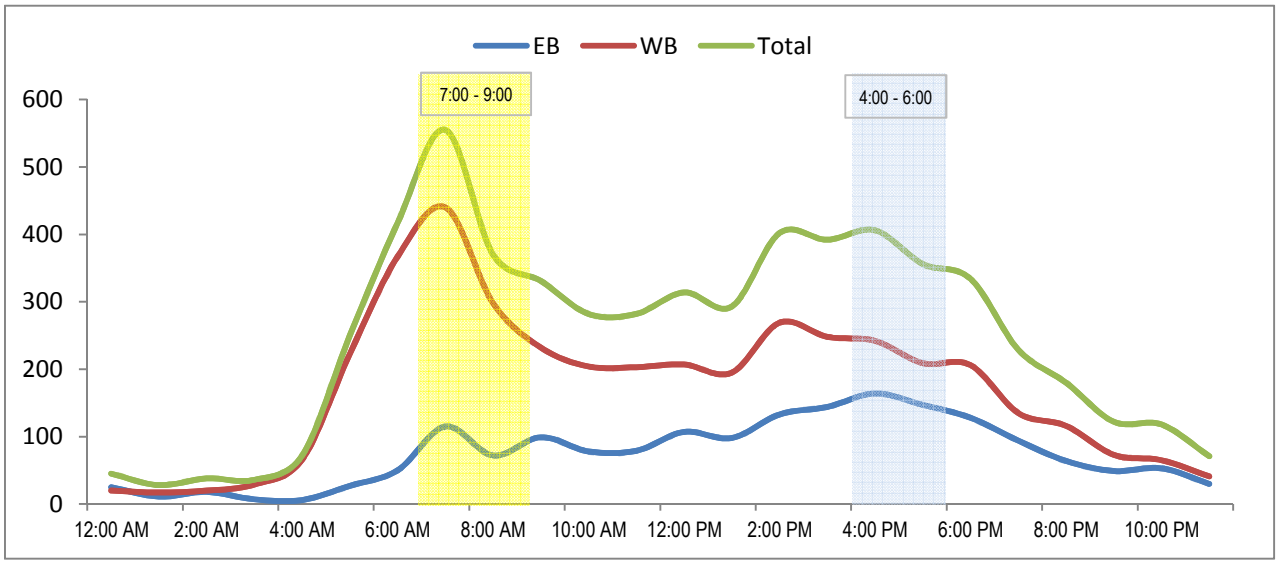
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,923*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	25	20	45
1:00 AM - 2:00 AM	11	17	28
2:00 AM - 3:00 AM	18	20	38
3:00 AM - 4:00 AM	7	29	36
4:00 AM - 5:00 AM	6	66	72
5:00 AM - 6:00 AM	27	223	250
6:00 AM - 7:00 AM	50	367	417
7:00 AM - 8:00 AM	115	440	555
8:00 AM - 9:00 AM	72	298	370
9:00 AM - 10:00 AM	99	232	331
10:00 AM - 11:00 AM	78	204	282
11:00 AM - 12:00 PM	79	203	282
Total	**587**	**2,119**	**2,706**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	107	207	314
1:00 PM - 2:00 PM	98	195	293
2:00 PM - 3:00 PM	133	269	402
3:00 PM - 4:00 PM	144	248	392
4:00 PM - 5:00 PM	164	242	406
5:00 PM - 6:00 PM	147	209	356
6:00 PM - 7:00 PM	128	206	334
7:00 PM - 8:00 PM	94	135	229
8:00 PM - 9:00 PM	64	116	180
9:00 PM - 10:00 PM	49	73	122
10:00 PM - 11:00 PM	53	65	118
11:00 PM - 12:00 AM	30	41	71
Total	**1,211**	**2,006**	**3,217**

24-Hour	*EB*	*Volume*	*1,798*	*24-Hour*	*WB*	*Volume*	*4,125*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 13. Lemon Grove Way between North Ave and Grove St

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

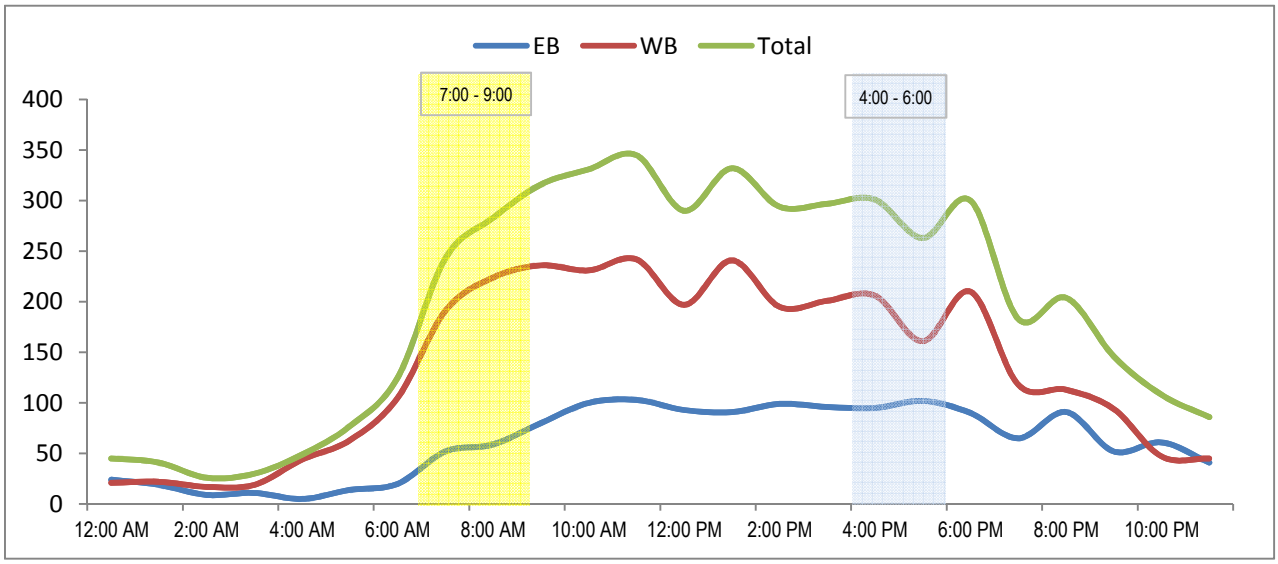
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,715*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	24	21	45
1:00 AM - 2:00 AM	19	22	41
2:00 AM - 3:00 AM	9	17	26
3:00 AM - 4:00 AM	11	19	30
4:00 AM - 5:00 AM	5	44	49
5:00 AM - 6:00 AM	14	63	77
6:00 AM - 7:00 AM	20	105	125
7:00 AM - 8:00 AM	52	191	243
8:00 AM - 9:00 AM	59	224	283
9:00 AM - 10:00 AM	80	236	316
10:00 AM - 11:00 AM	100	231	331
11:00 AM - 12:00 PM	103	242	345
Total	**496**	**1,415**	**1,911**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	93	197	290
1:00 PM - 2:00 PM	91	241	332
2:00 PM - 3:00 PM	99	195	294
3:00 PM - 4:00 PM	96	201	297
4:00 PM - 5:00 PM	95	206	301
5:00 PM - 6:00 PM	102	161	263
6:00 PM - 7:00 PM	90	210	300
7:00 PM - 8:00 PM	65	118	183
8:00 PM - 9:00 PM	91	113	204
9:00 PM - 10:00 PM	52	94	146
10:00 PM - 11:00 PM	61	47	108
11:00 PM - 12:00 AM	41	45	86
Total	**976**	**1,828**	**2,804**

24-Hour	*EB*	*Volume*	*1,472*	*24-Hour*	*WB*	*Volume*	*3,243*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 13. Lemon Grove Way between North Ave and Grove St

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

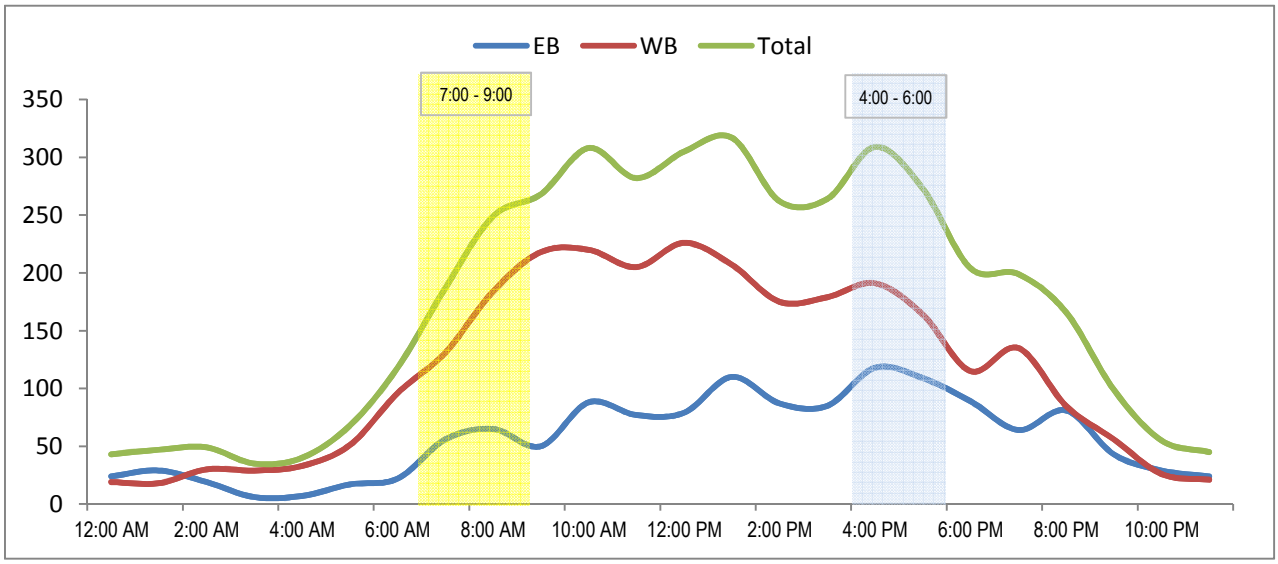
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,192*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	24	19	43
1:00 AM - 2:00 AM	29	18	47
2:00 AM - 3:00 AM	19	30	49
3:00 AM - 4:00 AM	6	29	35
4:00 AM - 5:00 AM	7	33	40
5:00 AM - 6:00 AM	17	51	68
6:00 AM - 7:00 AM	22	96	118
7:00 AM - 8:00 AM	56	131	187
8:00 AM - 9:00 AM	65	184	249
9:00 AM - 10:00 AM	50	218	268
10:00 AM - 11:00 AM	88	220	308
11:00 AM - 12:00 PM	77	205	282
Total	**460**	**1,234**	**1,694**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	79	226	305
1:00 PM - 2:00 PM	110	207	317
2:00 PM - 3:00 PM	87	175	262
3:00 PM - 4:00 PM	85	179	264
4:00 PM - 5:00 PM	118	191	309
5:00 PM - 6:00 PM	109	164	273
6:00 PM - 7:00 PM	89	115	204
7:00 PM - 8:00 PM	64	135	199
8:00 PM - 9:00 PM	81	85	166
9:00 PM - 10:00 PM	43	56	99
10:00 PM - 11:00 PM	29	26	55
11:00 PM - 12:00 AM	24	21	45
Total	**918**	**1,580**	**2,498**

24-Hour	*EB*	*Volume*	*1,378*	*24-Hour*	*WB*	*Volume*	*2,814*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

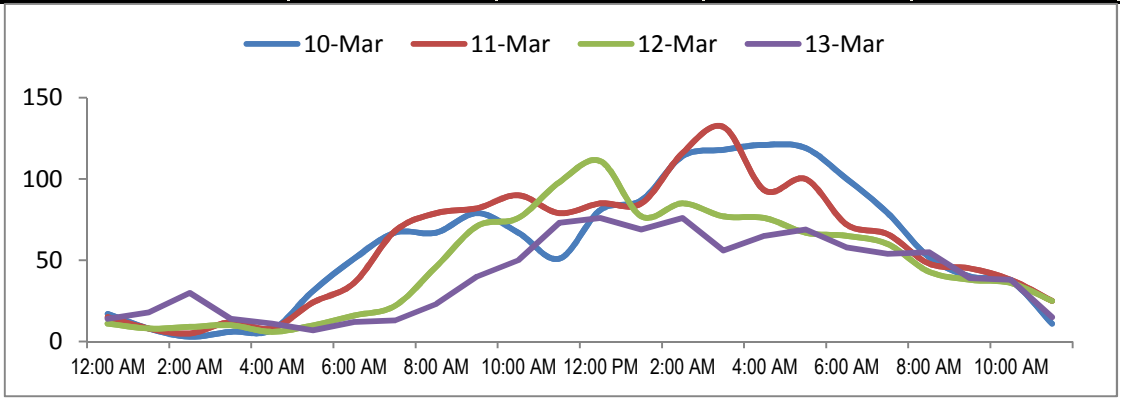
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 14. North Ave between Lemon Grove Ave and Grove St
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***1,236***
Highest Daily Traffic	***1,413***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	17	15	11	14
1:00 AM - 2:00 AM	8	8	8	18
2:00 AM - 3:00 AM	3	5	9	30
3:00 AM - 4:00 AM	6	12	10	14
4:00 AM - 5:00 AM	7	8	6	11
5:00 AM - 6:00 AM	31	24	10	7
6:00 AM - 7:00 AM	51	36	16	12
7:00 AM - 8:00 AM	67	68	22	13
8:00 AM - 9:00 AM	67	79	46	23
9:00 AM - 10:00 AM	79	82	71	40
10:00 AM - 11:00 AM	67	90	76	50
11:00 AM - 12:00 PM	51	79	98	73
12:00 PM - 1:00 PM	81	85	111	76
1:00 PM - 2:00 PM	87	85	77	69
2:00 PM - 3:00 PM	114	116	85	76
3:00 PM - 4:00 PM	118	132	77	56
4:00 PM - 5:00 PM	121	93	76	65
5:00 PM - 6:00 PM	119	100	67	69
6:00 PM - 7:00 PM	100	72	65	58
7:00 PM - 8:00 PM	79	66	60	54
8:00 PM - 9:00 PM	52	48	43	55
9:00 PM - 10:00 PM	40	45	38	39
10:00 PM - 11:00 PM	37	38	36	38
11:00 PM - 12:00 AM	11	25	25	15
Total	**1,413**	**1,411**	**1,143**	**975**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 14. North Ave between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

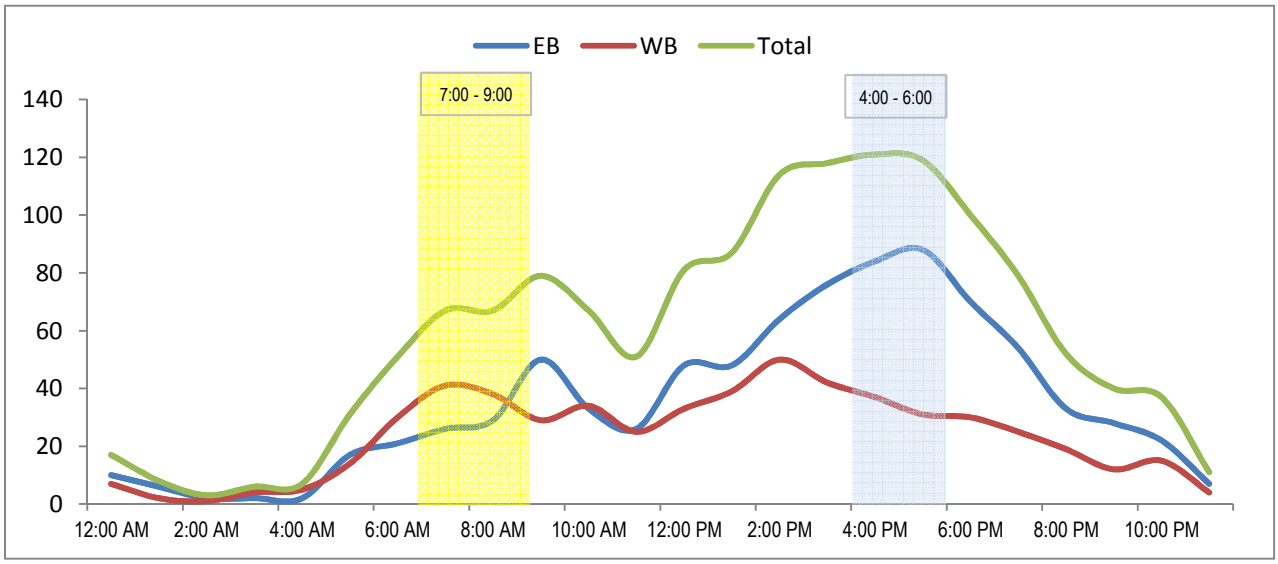
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,413*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	7	17
1:00 AM - 2:00 AM	6	2	8
2:00 AM - 3:00 AM	2	1	3
3:00 AM - 4:00 AM	2	4	6
4:00 AM - 5:00 AM	2	5	7
5:00 AM - 6:00 AM	17	14	31
6:00 AM - 7:00 AM	21	30	51
7:00 AM - 8:00 AM	26	41	67
8:00 AM - 9:00 AM	29	38	67
9:00 AM - 10:00 AM	50	29	79
10:00 AM - 11:00 AM	33	34	67
11:00 AM - 12:00 PM	26	25	51
Total	**224**	**230**	**454**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	48	33	81
1:00 PM - 2:00 PM	48	39	87
2:00 PM - 3:00 PM	64	50	114
3:00 PM - 4:00 PM	76	42	118
4:00 PM - 5:00 PM	84	37	121
5:00 PM - 6:00 PM	88	31	119
6:00 PM - 7:00 PM	70	30	100
7:00 PM - 8:00 PM	54	25	79
8:00 PM - 9:00 PM	33	19	52
9:00 PM - 10:00 PM	28	12	40
10:00 PM - 11:00 PM	22	15	37
11:00 PM - 12:00 AM	7	4	11
Total	**622**	**337**	**959**

24-Hour	*EB*	*Volume*	*846*	*24-Hour*	*WB*	*Volume*	*567*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 14. North Ave between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

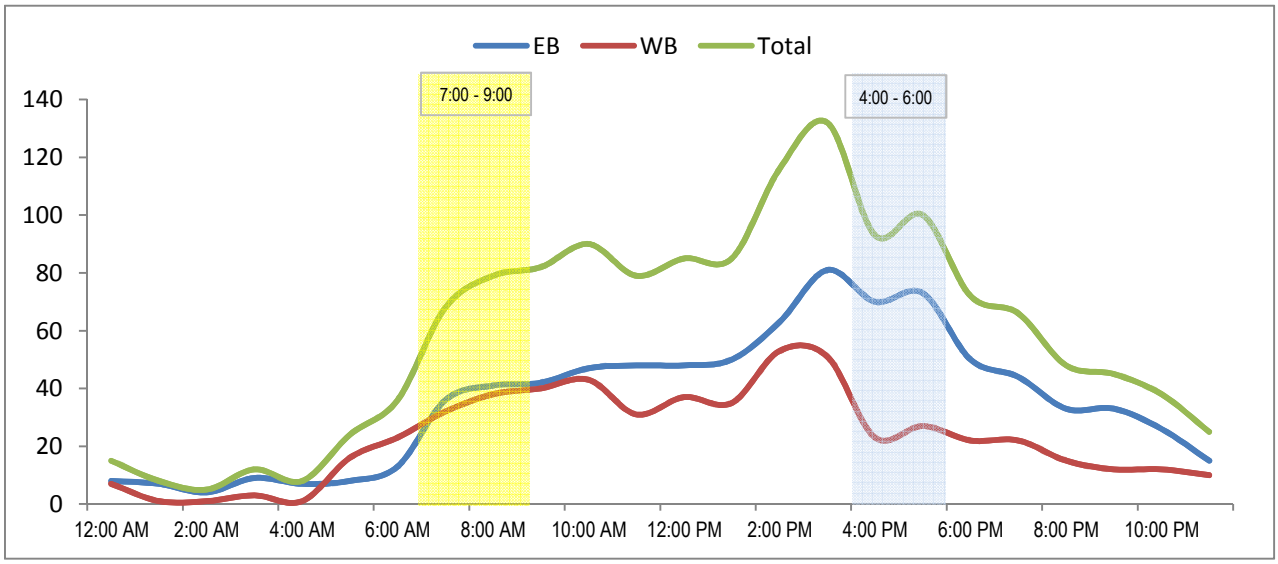
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,411*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	8	7	15
1:00 AM - 2:00 AM	7	1	8
2:00 AM - 3:00 AM	4	1	5
3:00 AM - 4:00 AM	9	3	12
4:00 AM - 5:00 AM	7	1	8
5:00 AM - 6:00 AM	8	16	24
6:00 AM - 7:00 AM	13	23	36
7:00 AM - 8:00 AM	36	32	68
8:00 AM - 9:00 AM	41	38	79
9:00 AM - 10:00 AM	42	40	82
10:00 AM - 11:00 AM	47	43	90
11:00 AM - 12:00 PM	48	31	79
Total	**270**	**236**	**506**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	48	37	85
1:00 PM - 2:00 PM	50	35	85
2:00 PM - 3:00 PM	63	53	116
3:00 PM - 4:00 PM	81	51	132
4:00 PM - 5:00 PM	70	23	93
5:00 PM - 6:00 PM	73	27	100
6:00 PM - 7:00 PM	50	22	72
7:00 PM - 8:00 PM	44	22	66
8:00 PM - 9:00 PM	33	15	48
9:00 PM - 10:00 PM	33	12	45
10:00 PM - 11:00 PM	26	12	38
11:00 PM - 12:00 AM	15	10	25
Total	**586**	**319**	**905**

24-Hour	*EB*	*Volume*	*856*	*24-Hour*	*WB*	*Volume*	*555*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 14. North Ave between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

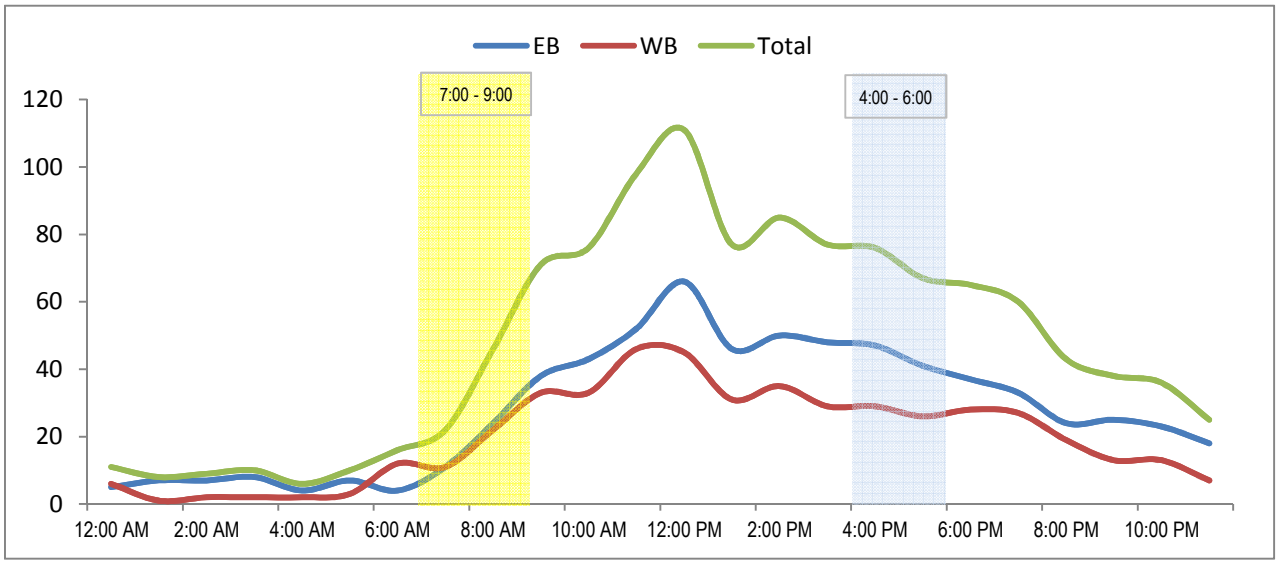
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,143*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	5	6	11
1:00 AM - 2:00 AM	7	1	8
2:00 AM - 3:00 AM	7	2	9
3:00 AM - 4:00 AM	8	2	10
4:00 AM - 5:00 AM	4	2	6
5:00 AM - 6:00 AM	7	3	10
6:00 AM - 7:00 AM	4	12	16
7:00 AM - 8:00 AM	11	11	22
8:00 AM - 9:00 AM	24	22	46
9:00 AM - 10:00 AM	38	33	71
10:00 AM - 11:00 AM	43	33	76
11:00 AM - 12:00 PM	52	46	98
Total	**210**	**173**	**383**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	66	45	111
1:00 PM - 2:00 PM	46	31	77
2:00 PM - 3:00 PM	50	35	85
3:00 PM - 4:00 PM	48	29	77
4:00 PM - 5:00 PM	47	29	76
5:00 PM - 6:00 PM	41	26	67
6:00 PM - 7:00 PM	37	28	65
7:00 PM - 8:00 PM	33	27	60
8:00 PM - 9:00 PM	24	19	43
9:00 PM - 10:00 PM	25	13	38
10:00 PM - 11:00 PM	23	13	36
11:00 PM - 12:00 AM	18	7	25
Total	**458**	**302**	**760**

24-Hour	*EB*	*Volume*	*668*	*24-Hour*	*WB*	*Volume*	*475*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 14. North Ave between Lemon Grove Ave and Grove St

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

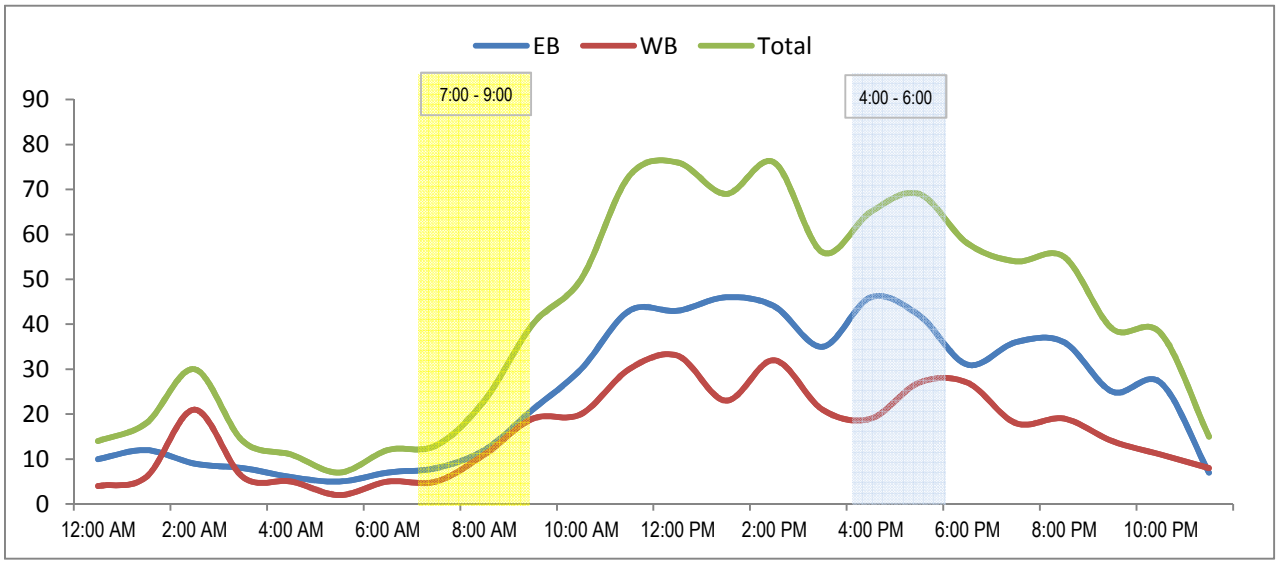
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*975*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	4	14
1:00 AM - 2:00 AM	12	6	18
2:00 AM - 3:00 AM	9	21	30
3:00 AM - 4:00 AM	8	6	14
4:00 AM - 5:00 AM	6	5	11
5:00 AM - 6:00 AM	5	2	7
6:00 AM - 7:00 AM	7	5	12
7:00 AM - 8:00 AM	8	5	13
8:00 AM - 9:00 AM	12	11	23
9:00 AM - 10:00 AM	21	19	40
10:00 AM - 11:00 AM	30	20	50
11:00 AM - 12:00 PM	43	30	73
Total	**171**	**134**	**305**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	43	33	76
1:00 PM - 2:00 PM	46	23	69
2:00 PM - 3:00 PM	44	32	76
3:00 PM - 4:00 PM	35	21	56
4:00 PM - 5:00 PM	46	19	65
5:00 PM - 6:00 PM	42	27	69
6:00 PM - 7:00 PM	31	27	58
7:00 PM - 8:00 PM	36	18	54
8:00 PM - 9:00 PM	36	19	55
9:00 PM - 10:00 PM	25	14	39
10:00 PM - 11:00 PM	27	11	38
11:00 PM - 12:00 AM	7	8	15
Total	**418**	**252**	**670**

24-Hour	*EB*	*Volume*	*589*	*24-Hour*	*WB*	*Volume*	*386*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

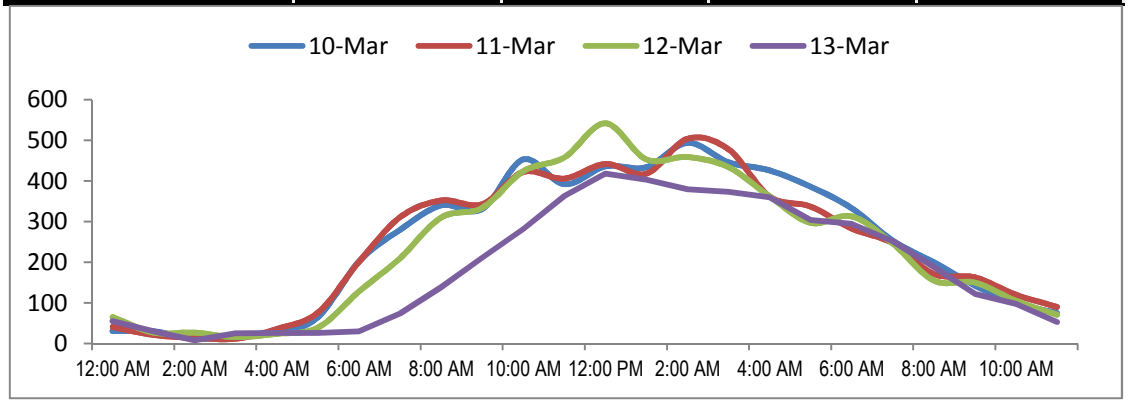
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 15. North Ave between Olive St and Citronica Driveway
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***5,480***
Highest Daily Traffic	***5,905***

Time			Hourly Volume			
			10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM	-	1:00 AM	31	41	65	55
1:00 AM	-	2:00 AM	30	21	27	30
2:00 AM	-	3:00 AM	12	14	27	8
3:00 AM	-	4:00 AM	18	12	16	25
4:00 AM	-	5:00 AM	26	36	24	26
5:00 AM	-	6:00 AM	65	76	39	26
6:00 AM	-	7:00 AM	202	201	128	30
7:00 AM	-	8:00 AM	280	311	210	74
8:00 AM	-	9:00 AM	340	352	310	139
9:00 AM	-	10:00 AM	331	343	334	211
10:00 AM	-	11:00 AM	453	422	424	282
11:00 AM	-	12:00 PM	392	406	458	363
12:00 PM	-	1:00 PM	436	442	542	418
1:00 PM	-	2:00 PM	434	418	453	403
2:00 PM	-	3:00 PM	494	504	459	380
3:00 PM	-	4:00 PM	446	478	434	373
4:00 PM	-	5:00 PM	426	362	362	360
5:00 PM	-	6:00 PM	386	337	297	304
6:00 PM	-	7:00 PM	333	283	313	295
7:00 PM	-	8:00 PM	253	247	246	252
8:00 PM	-	9:00 PM	200	171	155	188
9:00 PM	-	10:00 PM	143	163	150	122
10:00 PM	-	11:00 PM	99	120	105	98
11:00 PM	-	12:00 AM	75	90	71	53
Total			**5,905**	**5,850**	**5,649**	**4,515**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 15. North Ave between Olive St and Citronica Driveway

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

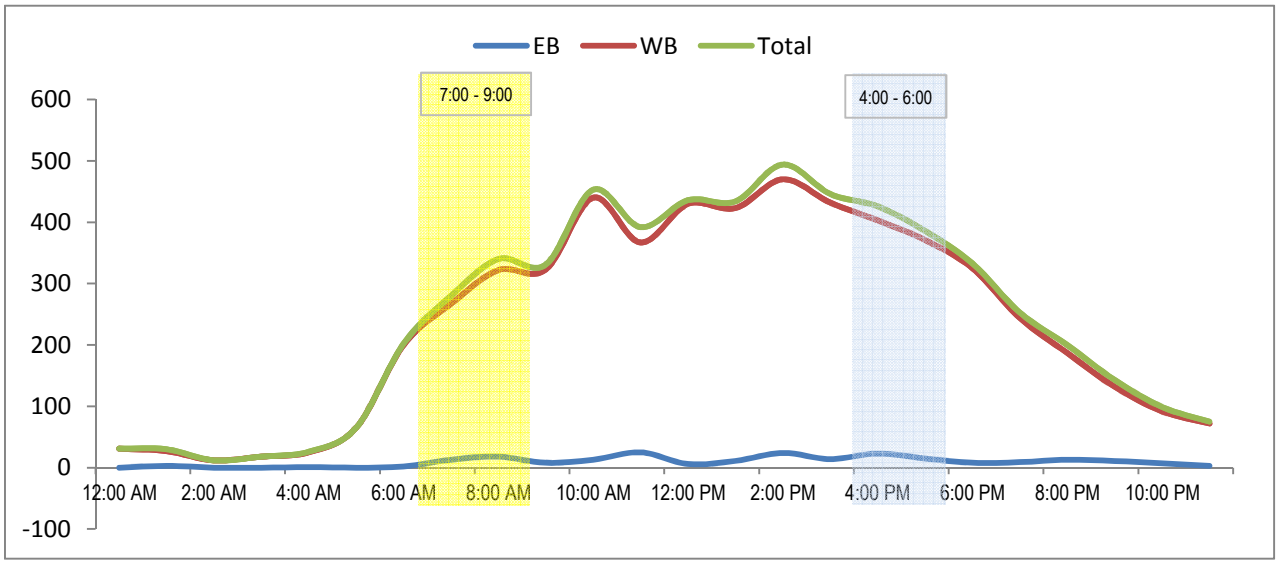
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,905***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	0	31	31
1:00 AM - 2:00 AM	3	27	30
2:00 AM - 3:00 AM	0	12	12
3:00 AM - 4:00 AM	0	18	18
4:00 AM - 5:00 AM	1	25	26
5:00 AM - 6:00 AM	0	65	65
6:00 AM - 7:00 AM	2	200	202
7:00 AM - 8:00 AM	13	267	280
8:00 AM - 9:00 AM	18	322	340
9:00 AM - 10:00 AM	8	323	331
10:00 AM - 11:00 AM	13	440	453
11:00 AM - 12:00 PM	25	367	392
Total	**83**	**2,097**	**2,180**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	6	430	436
1:00 PM - 2:00 PM	11	423	434
2:00 PM - 3:00 PM	24	470	494
3:00 PM - 4:00 PM	14	432	446
4:00 PM - 5:00 PM	23	403	426
5:00 PM - 6:00 PM	15	371	386
6:00 PM - 7:00 PM	8	325	333
7:00 PM - 8:00 PM	9	244	253
8:00 PM - 9:00 PM	13	187	200
9:00 PM - 10:00 PM	11	132	143
10:00 PM - 11:00 PM	7	92	99
11:00 PM - 12:00 AM	3	72	75
Total	**144**	**3,581**	**3,725**

24-Hour	***EB***	***Volume***	***227***	***24-Hour***	***WB***	***Volume***	***5,678***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 15. North Ave between Olive St and Citronica Driveway

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

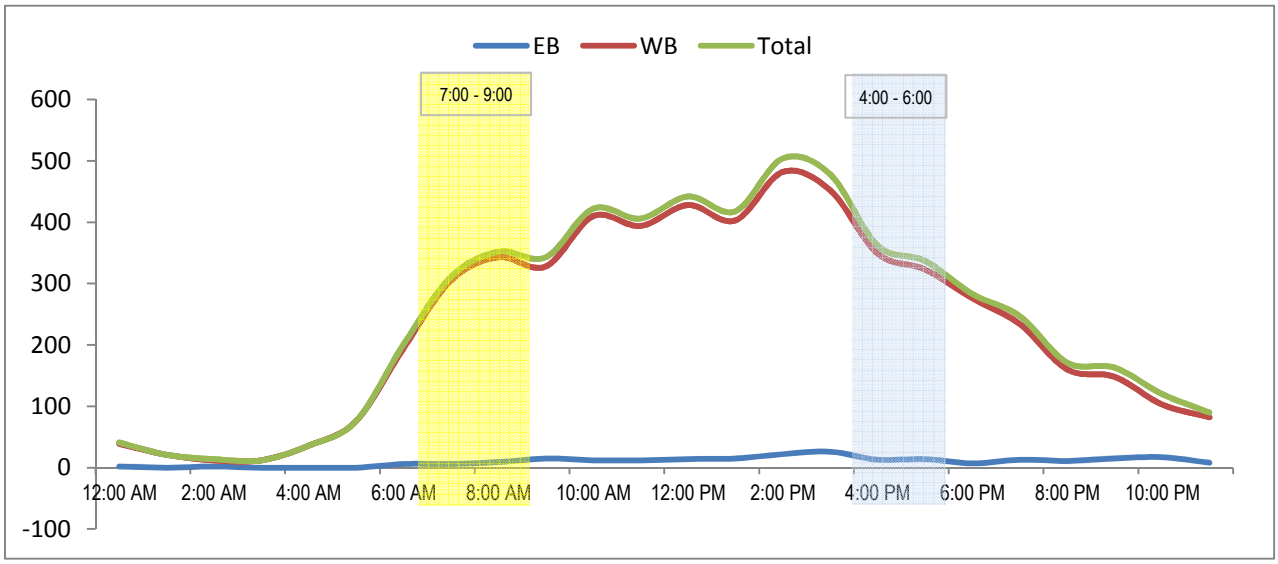
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,850***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	39	41
1:00 AM - 2:00 AM	0	21	21
2:00 AM - 3:00 AM	2	12	14
3:00 AM - 4:00 AM	0	12	12
4:00 AM - 5:00 AM	0	36	36
5:00 AM - 6:00 AM	0	76	76
6:00 AM - 7:00 AM	6	195	201
7:00 AM - 8:00 AM	6	305	311
8:00 AM - 9:00 AM	9	343	352
9:00 AM - 10:00 AM	15	328	343
10:00 AM - 11:00 AM	12	410	422
11:00 AM - 12:00 PM	12	394	406
Total	**64**	**2,171**	**2,235**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	14	428	442
1:00 PM - 2:00 PM	15	403	418
2:00 PM - 3:00 PM	22	482	504
3:00 PM - 4:00 PM	26	452	478
4:00 PM - 5:00 PM	13	349	362
5:00 PM - 6:00 PM	14	323	337
6:00 PM - 7:00 PM	7	276	283
7:00 PM - 8:00 PM	13	234	247
8:00 PM - 9:00 PM	11	160	171
9:00 PM - 10:00 PM	15	148	163
10:00 PM - 11:00 PM	17	103	120
11:00 PM - 12:00 AM	8	82	90
Total	**175**	**3,440**	**3,615**

24-Hour	***EB***	***Volume***	***239***	***24-Hour***	***WB***	***Volume***	***5,611***



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 15. North Ave between Olive St and Citronica Driveway

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

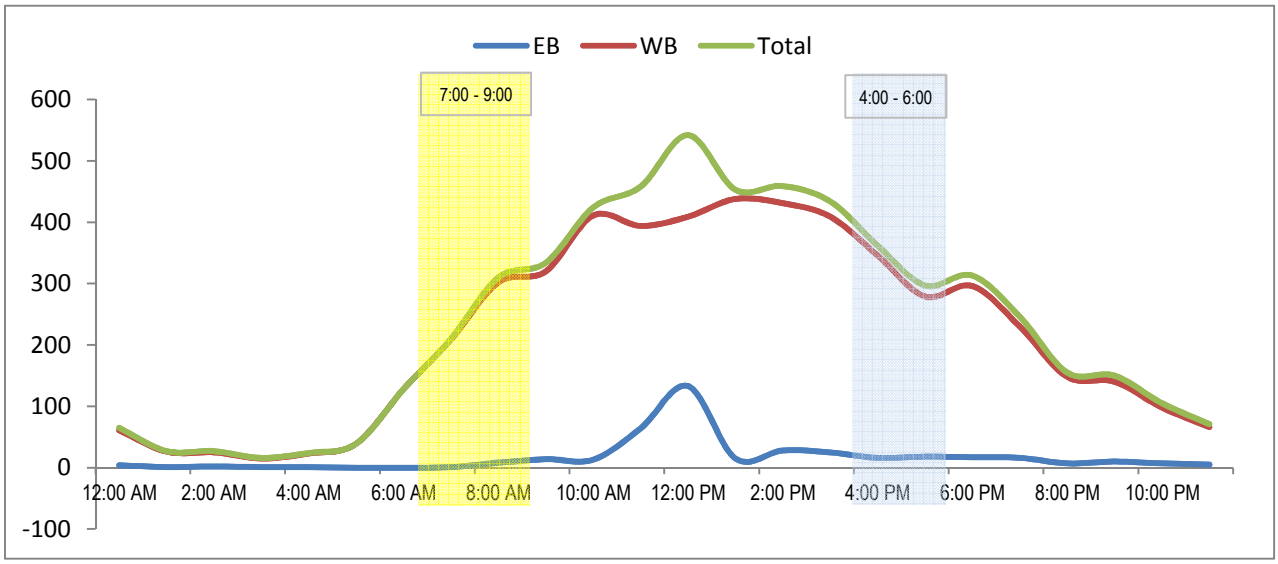
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,649***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	61	65
1:00 AM - 2:00 AM	1	26	27
2:00 AM - 3:00 AM	2	25	27
3:00 AM - 4:00 AM	1	15	16
4:00 AM - 5:00 AM	1	23	24
5:00 AM - 6:00 AM	0	39	39
6:00 AM - 7:00 AM	0	128	128
7:00 AM - 8:00 AM	1	209	210
8:00 AM - 9:00 AM	8	302	310
9:00 AM - 10:00 AM	14	320	334
10:00 AM - 11:00 AM	13	411	424
11:00 AM - 12:00 PM	64	394	458
Total	**109**	**1,953**	**2,062**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	133	409	542
1:00 PM - 2:00 PM	15	438	453
2:00 PM - 3:00 PM	28	431	459
3:00 PM - 4:00 PM	25	409	434
4:00 PM - 5:00 PM	16	346	362
5:00 PM - 6:00 PM	18	279	297
6:00 PM - 7:00 PM	17	296	313
7:00 PM - 8:00 PM	16	230	246
8:00 PM - 9:00 PM	7	148	155
9:00 PM - 10:00 PM	10	140	150
10:00 PM - 11:00 PM	7	98	105
11:00 PM - 12:00 AM	5	66	71
Total	**297**	**3,290**	**3,587**

24-Hour	***EB***	***Volume***	***406***	***24-Hour***	***WB***	***Volume***	***5,243***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 15. North Ave between Olive St and Citronica Driveway

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

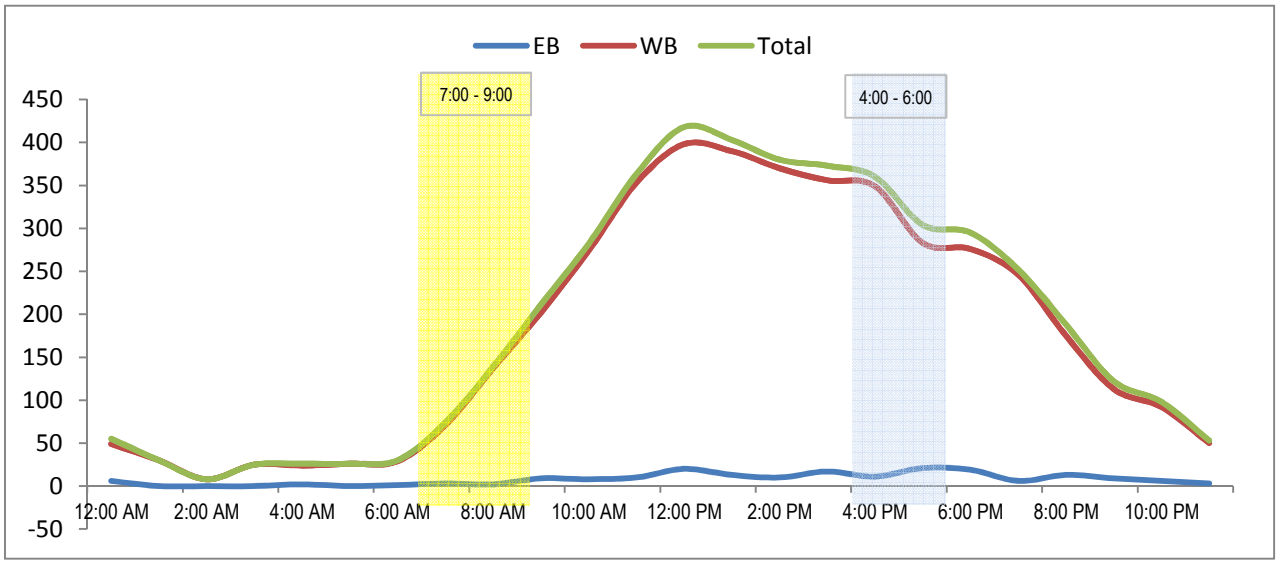
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***4,515***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	6	49	55
1:00 AM - 2:00 AM	0	30	30
2:00 AM - 3:00 AM	0	8	8
3:00 AM - 4:00 AM	0	25	25
4:00 AM - 5:00 AM	2	24	26
5:00 AM - 6:00 AM	0	26	26
6:00 AM - 7:00 AM	1	29	30
7:00 AM - 8:00 AM	3	71	74
8:00 AM - 9:00 AM	2	137	139
9:00 AM - 10:00 AM	9	202	211
10:00 AM - 11:00 AM	8	274	282
11:00 AM - 12:00 PM	10	353	363
Total	**41**	**1,228**	**1,269**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	20	398	418
1:00 PM - 2:00 PM	13	390	403
2:00 PM - 3:00 PM	10	370	380
3:00 PM - 4:00 PM	17	356	373
4:00 PM - 5:00 PM	11	349	360
5:00 PM - 6:00 PM	21	283	304
6:00 PM - 7:00 PM	19	276	295
7:00 PM - 8:00 PM	6	246	252
8:00 PM - 9:00 PM	13	175	188
9:00 PM - 10:00 PM	9	113	122
10:00 PM - 11:00 PM	6	92	98
11:00 PM - 12:00 AM	3	50	53
Total	**148**	**3,098**	**3,246**

24-Hour	***EB***	***Volume***	***189***	***24-Hour***	***WB***	***Volume***	***4,326***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

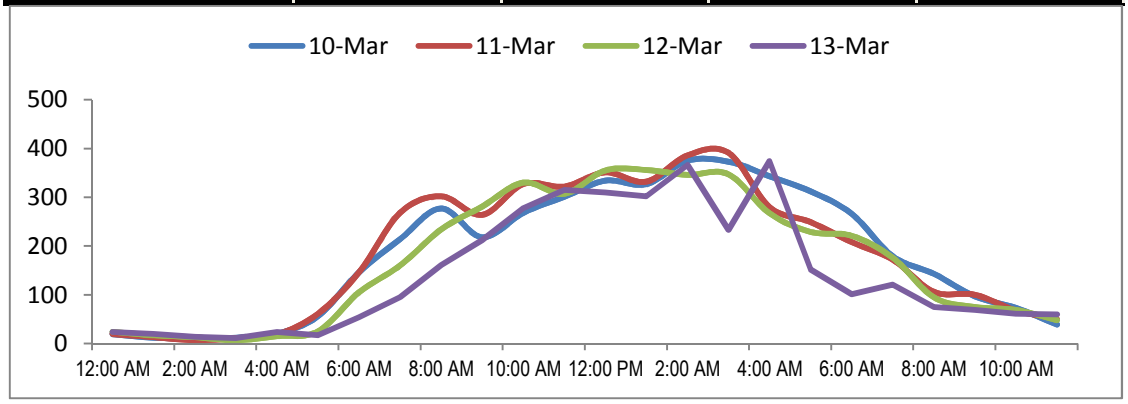
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 16. North Ave between Buena Vista Ave and Olive St
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***4,105***
Highest Daily Traffic	***4,453***

Time			Hourly Volume			
			10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM	-	1:00 AM	19	20	24	24
1:00 AM	-	2:00 AM	12	13	17	20
2:00 AM	-	3:00 AM	10	7	13	14
3:00 AM	-	4:00 AM	12	11	7	11
4:00 AM	-	5:00 AM	20	19	15	24
5:00 AM	-	6:00 AM	56	61	25	17
6:00 AM	-	7:00 AM	146	146	105	54
7:00 AM	-	8:00 AM	214	268	160	95
8:00 AM	-	9:00 AM	277	302	234	161
9:00 AM	-	10:00 AM	218	264	281	212
10:00 AM	-	11:00 AM	268	327	330	278
11:00 AM	-	12:00 PM	301	322	307	315
12:00 PM	-	1:00 PM	334	351	355	310
1:00 PM	-	2:00 PM	327	332	356	302
2:00 PM	-	3:00 PM	375	386	346	366
3:00 PM	-	4:00 PM	373	391	347	233
4:00 PM	-	5:00 PM	343	280	267	374
5:00 PM	-	6:00 PM	312	249	229	152
6:00 PM	-	7:00 PM	266	208	221	101
7:00 PM	-	8:00 PM	179	172	176	121
8:00 PM	-	9:00 PM	143	106	95	75
9:00 PM	-	10:00 PM	97	100	75	69
10:00 PM	-	11:00 PM	73	68	69	61
11:00 PM	-	12:00 AM	39	50	48	60
Total			**4,414**	**4,453**	**4,102**	**3,449**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 16. North Ave between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

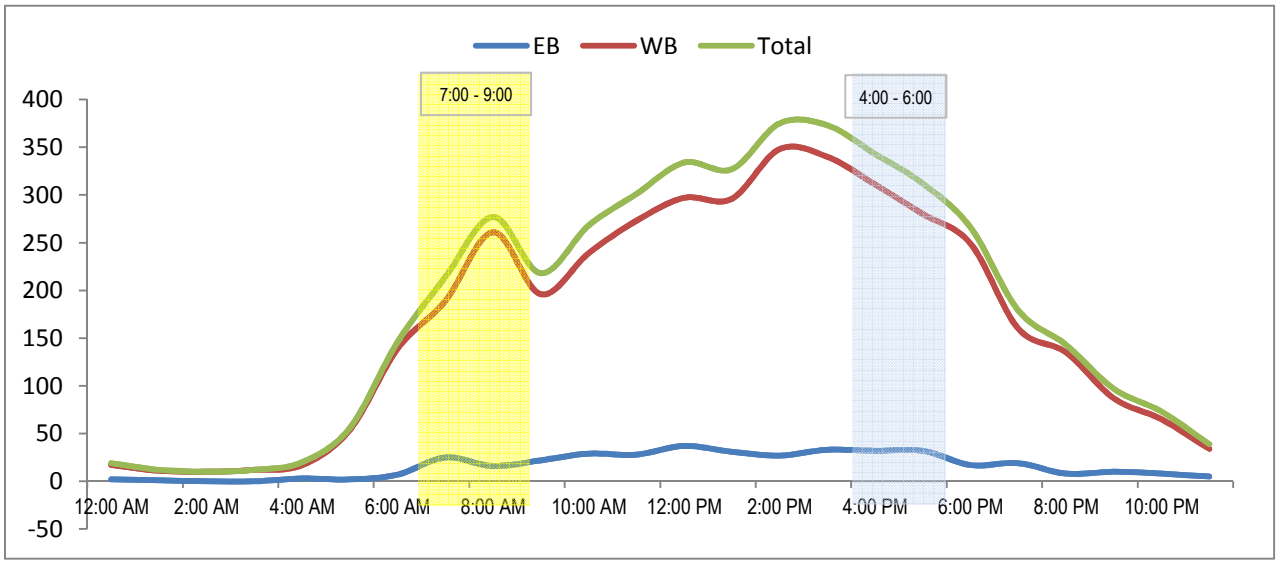
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***4,414***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	17	19
1:00 AM - 2:00 AM	1	11	12
2:00 AM - 3:00 AM	0	10	10
3:00 AM - 4:00 AM	0	12	12
4:00 AM - 5:00 AM	3	17	20
5:00 AM - 6:00 AM	2	54	56
6:00 AM - 7:00 AM	7	139	146
7:00 AM - 8:00 AM	25	189	214
8:00 AM - 9:00 AM	16	261	277
9:00 AM - 10:00 AM	22	196	218
10:00 AM - 11:00 AM	29	239	268
11:00 AM - 12:00 PM	28	273	301
Total	**135**	**1,418**	**1,553**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	37	297	334
1:00 PM - 2:00 PM	31	296	327
2:00 PM - 3:00 PM	27	348	375
3:00 PM - 4:00 PM	33	340	373
4:00 PM - 5:00 PM	32	311	343
5:00 PM - 6:00 PM	32	280	312
6:00 PM - 7:00 PM	17	249	266
7:00 PM - 8:00 PM	19	160	179
8:00 PM - 9:00 PM	8	135	143
9:00 PM - 10:00 PM	10	87	97
10:00 PM - 11:00 PM	8	65	73
11:00 PM - 12:00 AM	5	34	39
Total	**259**	**2,602**	**2,861**

24-Hour	***EB***	***Volume***	***394***	***24-Hour***	***WB***	***Volume***	***4,020***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 16. North Ave between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

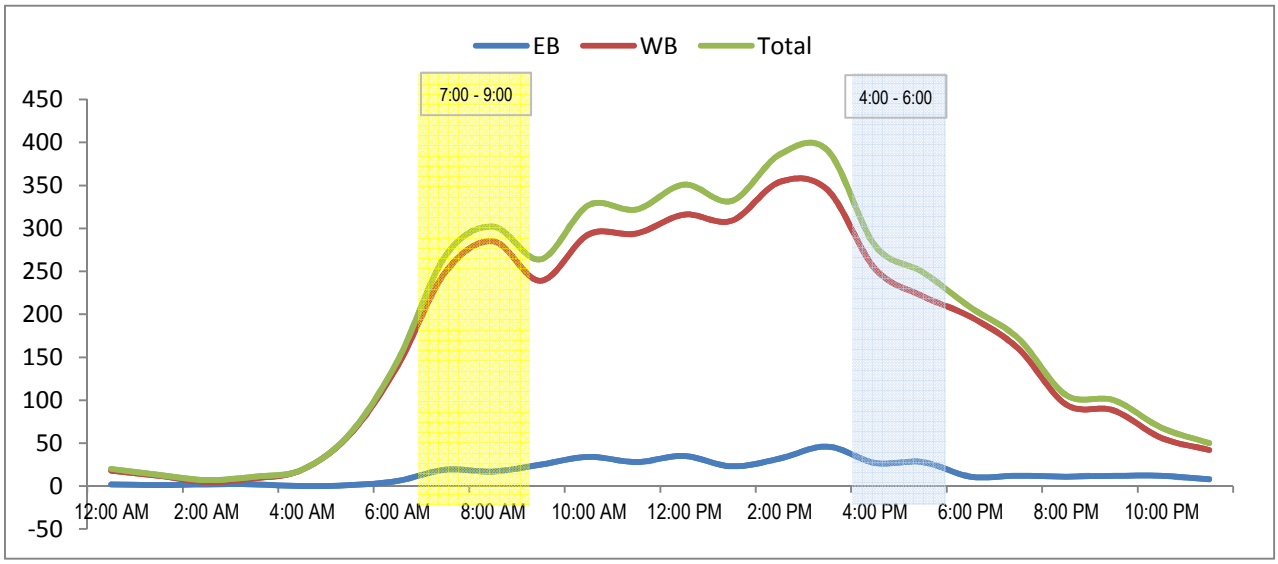
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,453*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	18	20
1:00 AM - 2:00 AM	1	12	13
2:00 AM - 3:00 AM	2	5	7
3:00 AM - 4:00 AM	2	9	11
4:00 AM - 5:00 AM	0	19	19
5:00 AM - 6:00 AM	1	60	61
6:00 AM - 7:00 AM	6	140	146
7:00 AM - 8:00 AM	19	249	268
8:00 AM - 9:00 AM	17	285	302
9:00 AM - 10:00 AM	25	239	264
10:00 AM - 11:00 AM	34	293	327
11:00 AM - 12:00 PM	28	294	322
Total	**137**	**1,623**	**1,760**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	35	316	351
1:00 PM - 2:00 PM	23	309	332
2:00 PM - 3:00 PM	32	354	386
3:00 PM - 4:00 PM	46	345	391
4:00 PM - 5:00 PM	27	253	280
5:00 PM - 6:00 PM	28	221	249
6:00 PM - 7:00 PM	11	197	208
7:00 PM - 8:00 PM	12	160	172
8:00 PM - 9:00 PM	11	95	106
9:00 PM - 10:00 PM	12	88	100
10:00 PM - 11:00 PM	12	56	68
11:00 PM - 12:00 AM	8	42	50
Total	**257**	**2,436**	**2,693**

24-Hour	*EB*	*Volume*	*394*	*24-Hour*	*WB*	*Volume*	*4,059*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 16. North Ave between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

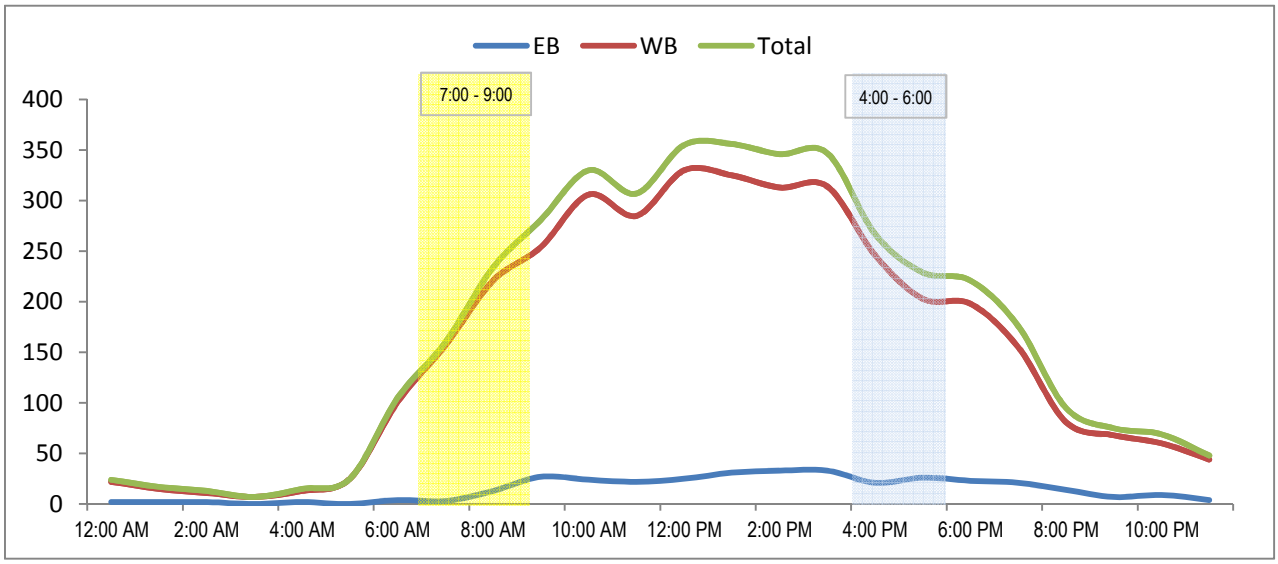
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,102*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	22	24
1:00 AM - 2:00 AM	2	15	17
2:00 AM - 3:00 AM	2	11	13
3:00 AM - 4:00 AM	0	7	7
4:00 AM - 5:00 AM	2	13	15
5:00 AM - 6:00 AM	0	25	25
6:00 AM - 7:00 AM	4	101	105
7:00 AM - 8:00 AM	3	157	160
8:00 AM - 9:00 AM	13	221	234
9:00 AM - 10:00 AM	27	254	281
10:00 AM - 11:00 AM	24	306	330
11:00 AM - 12:00 PM	22	285	307
Total	**101**	**1,417**	**1,518**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	25	330	355
1:00 PM - 2:00 PM	31	325	356
2:00 PM - 3:00 PM	33	313	346
3:00 PM - 4:00 PM	33	314	347
4:00 PM - 5:00 PM	21	246	267
5:00 PM - 6:00 PM	26	203	229
6:00 PM - 7:00 PM	23	198	221
7:00 PM - 8:00 PM	21	155	176
8:00 PM - 9:00 PM	14	81	95
9:00 PM - 10:00 PM	7	68	75
10:00 PM - 11:00 PM	9	60	69
11:00 PM - 12:00 AM	4	44	48
Total	**247**	**2,337**	**2,584**

24-Hour	*EB*	*Volume*	*348*	*24-Hour*	*WB*	*Volume*	*3,754*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 16. North Ave between Buena Vista Ave and Olive St

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

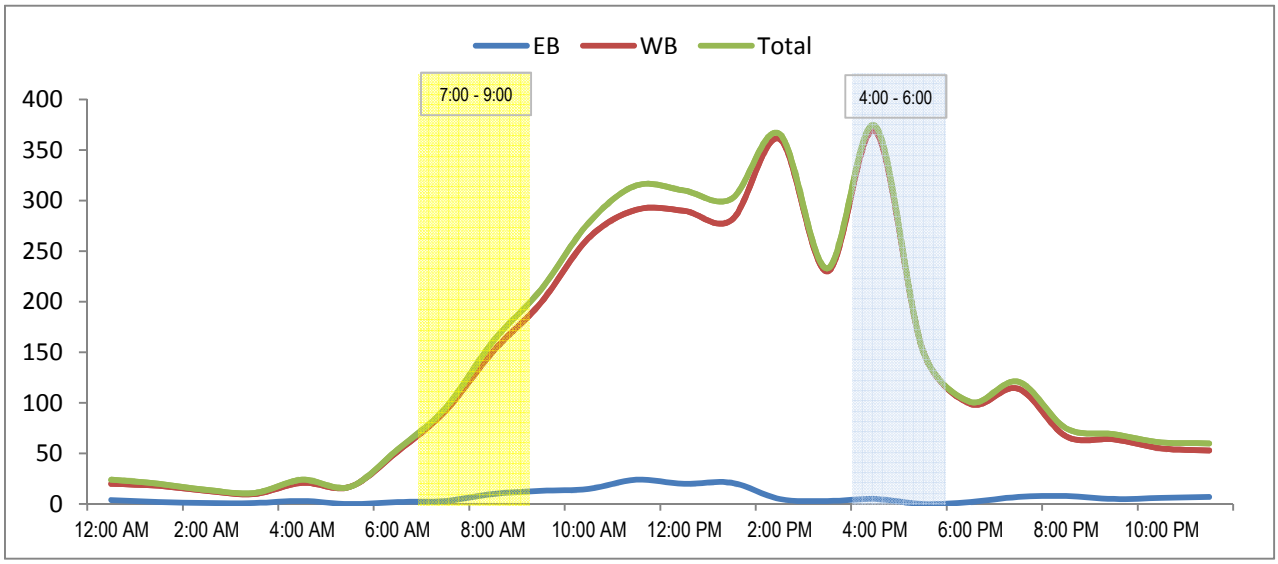
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***3,449***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	20	24
1:00 AM - 2:00 AM	2	18	20
2:00 AM - 3:00 AM	1	13	14
3:00 AM - 4:00 AM	1	10	11
4:00 AM - 5:00 AM	3	21	24
5:00 AM - 6:00 AM	0	17	17
6:00 AM - 7:00 AM	2	52	54
7:00 AM - 8:00 AM	3	92	95
8:00 AM - 9:00 AM	10	151	161
9:00 AM - 10:00 AM	13	199	212
10:00 AM - 11:00 AM	15	263	278
11:00 AM - 12:00 PM	24	291	315
Total	**78**	**1,147**	**1,225**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	20	290	310
1:00 PM - 2:00 PM	21	281	302
2:00 PM - 3:00 PM	5	361	366
3:00 PM - 4:00 PM	3	230	233
4:00 PM - 5:00 PM	5	369	374
5:00 PM - 6:00 PM	0	152	152
6:00 PM - 7:00 PM	2	99	101
7:00 PM - 8:00 PM	7	114	121
8:00 PM - 9:00 PM	8	67	75
9:00 PM - 10:00 PM	5	64	69
10:00 PM - 11:00 PM	6	55	61
11:00 PM - 12:00 AM	7	53	60
Total	**89**	**2,135**	**2,224**

24-Hour	***EB***	***Volume***	***167***	***24-Hour***	***WB***	***Volume***	***3,282***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

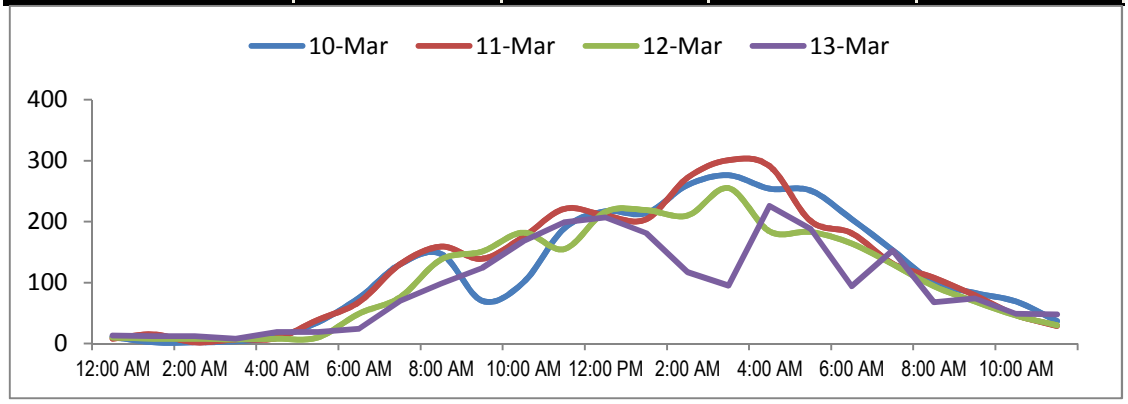
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 17. North Ave between West St and Buena Vista Ave
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***2,697***
Highest Daily Traffic	***3,026***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	11	8	10	13
1:00 AM - 2:00 AM	2	15	8	12
2:00 AM - 3:00 AM	2	2	8	12
3:00 AM - 4:00 AM	4	7	7	8
4:00 AM - 5:00 AM	11	9	8	19
5:00 AM - 6:00 AM	35	39	10	19
6:00 AM - 7:00 AM	75	68	49	24
7:00 AM - 8:00 AM	130	130	76	70
8:00 AM - 9:00 AM	147	159	138	98
9:00 AM - 10:00 AM	70	139	151	124
10:00 AM - 11:00 AM	100	175	182	168
11:00 AM - 12:00 PM	189	221	155	199
12:00 PM - 1:00 PM	217	210	216	207
1:00 PM - 2:00 PM	214	204	219	181
2:00 PM - 3:00 PM	260	272	210	117
3:00 PM - 4:00 PM	276	301	255	95
4:00 PM - 5:00 PM	254	291	184	226
5:00 PM - 6:00 PM	251	201	183	188
6:00 PM - 7:00 PM	204	181	164	94
7:00 PM - 8:00 PM	153	131	130	153
8:00 PM - 9:00 PM	101	108	94	68
9:00 PM - 10:00 PM	83	79	69	74
10:00 PM - 11:00 PM	69	47	46	49
11:00 PM - 12:00 AM	37	29	30	48
Total	**2,895**	**3,026**	**2,602**	**2,266**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 17. North Ave between West St and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

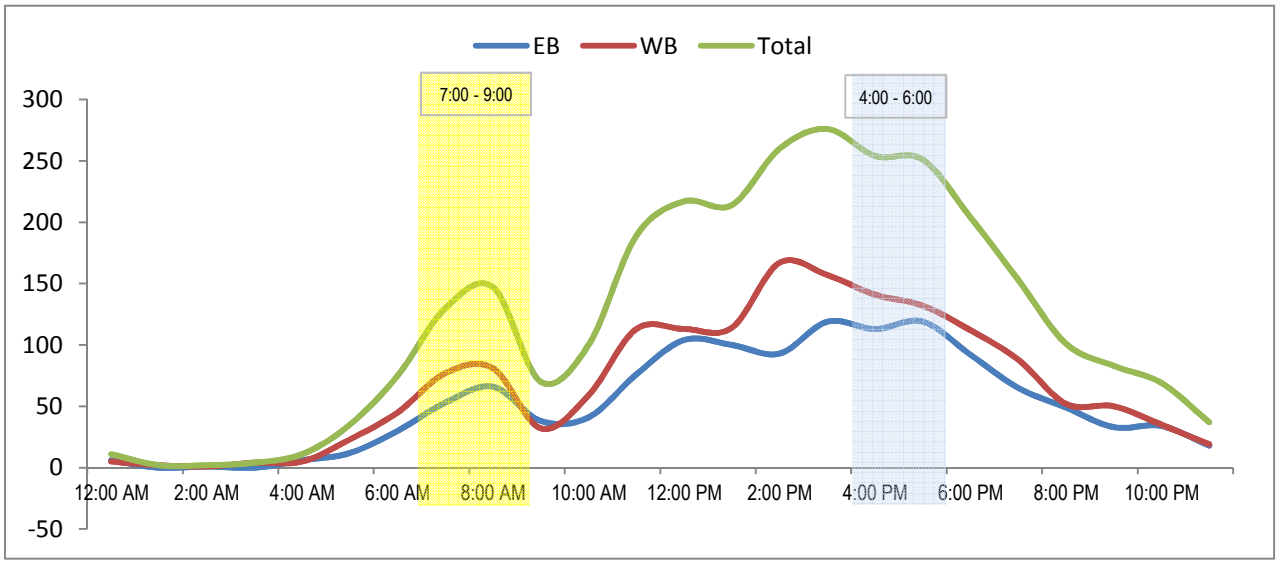
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*2,895*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	6	5	11
1:00 AM - 2:00 AM	0	2	2
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	0	4	4
4:00 AM - 5:00 AM	6	5	11
5:00 AM - 6:00 AM	12	23	35
6:00 AM - 7:00 AM	30	45	75
7:00 AM - 8:00 AM	53	77	130
8:00 AM - 9:00 AM	66	81	147
9:00 AM - 10:00 AM	38	32	70
10:00 AM - 11:00 AM	41	59	100
11:00 AM - 12:00 PM	76	113	189
Total	**329**	**447**	**776**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	104	113	217
1:00 PM - 2:00 PM	100	114	214
2:00 PM - 3:00 PM	93	167	260
3:00 PM - 4:00 PM	119	157	276
4:00 PM - 5:00 PM	113	141	254
5:00 PM - 6:00 PM	119	132	251
6:00 PM - 7:00 PM	92	112	204
7:00 PM - 8:00 PM	65	88	153
8:00 PM - 9:00 PM	49	52	101
9:00 PM - 10:00 PM	33	50	83
10:00 PM - 11:00 PM	34	35	69
11:00 PM - 12:00 AM	18	19	37
Total	**939**	**1,180**	**2,119**

24-Hour	*EB*	*Volume*	*1,268*	*24-Hour*	*WB*	*Volume*	*1,627*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 17. North Ave between West St and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

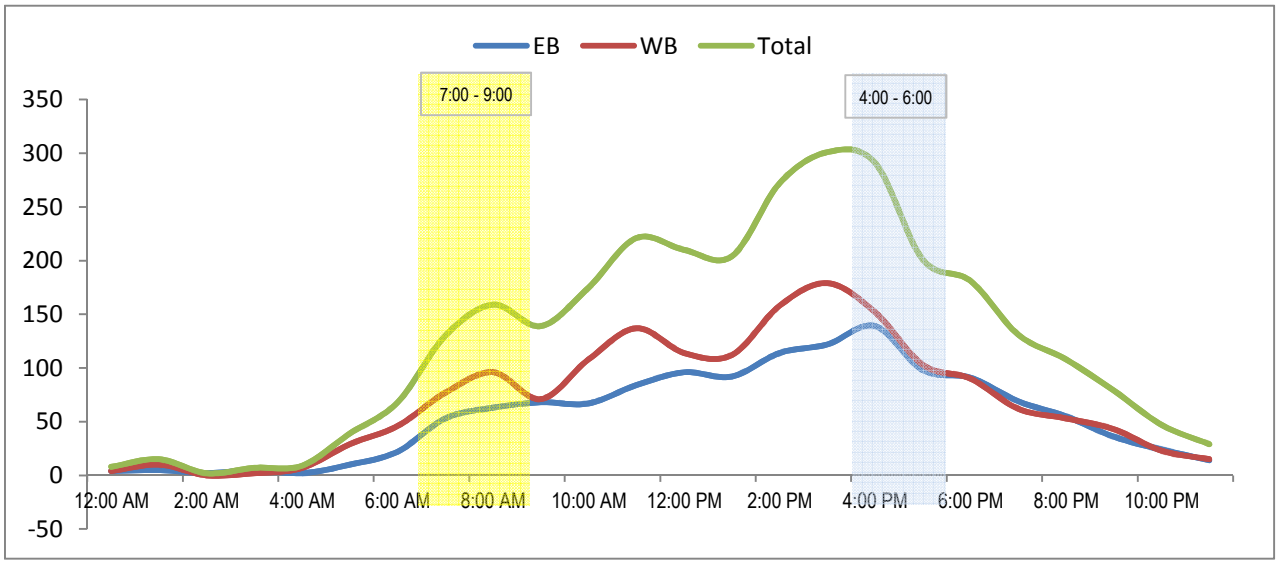
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***3,026***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	4	8
1:00 AM - 2:00 AM	5	10	15
2:00 AM - 3:00 AM	2	0	2
3:00 AM - 4:00 AM	5	2	7
4:00 AM - 5:00 AM	2	7	9
5:00 AM - 6:00 AM	10	29	39
6:00 AM - 7:00 AM	22	46	68
7:00 AM - 8:00 AM	53	77	130
8:00 AM - 9:00 AM	63	96	159
9:00 AM - 10:00 AM	68	71	139
10:00 AM - 11:00 AM	67	108	175
11:00 AM - 12:00 PM	84	137	221
Total	**385**	**587**	**972**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	96	114	210
1:00 PM - 2:00 PM	92	112	204
2:00 PM - 3:00 PM	114	158	272
3:00 PM - 4:00 PM	122	179	301
4:00 PM - 5:00 PM	139	152	291
5:00 PM - 6:00 PM	98	103	201
6:00 PM - 7:00 PM	91	90	181
7:00 PM - 8:00 PM	69	62	131
8:00 PM - 9:00 PM	55	53	108
9:00 PM - 10:00 PM	36	43	79
10:00 PM - 11:00 PM	24	23	47
11:00 PM - 12:00 AM	14	15	29
Total	**950**	**1,104**	**2,054**

24-Hour	***EB***	***Volume***	***1,335***	***24-Hour***	***WB***	***Volume***	***1,691***



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 17. North Ave between West St and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

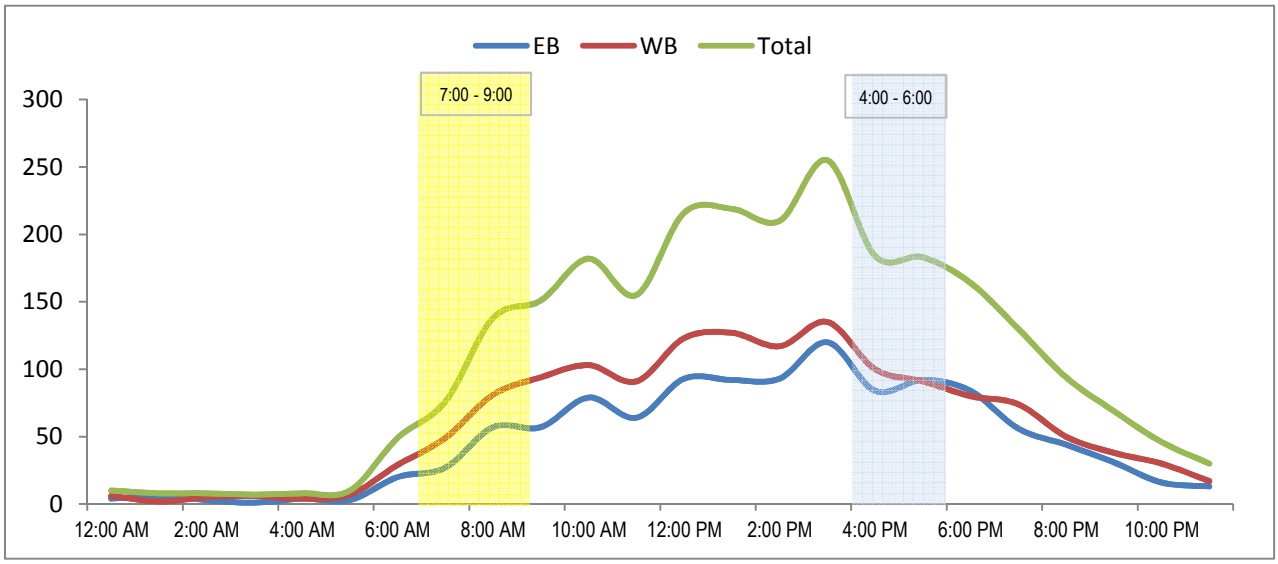
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,602***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	6	10
1:00 AM - 2:00 AM	6	2	8
2:00 AM - 3:00 AM	3	5	8
3:00 AM - 4:00 AM	1	6	7
4:00 AM - 5:00 AM	4	4	8
5:00 AM - 6:00 AM	3	7	10
6:00 AM - 7:00 AM	20	29	49
7:00 AM - 8:00 AM	27	49	76
8:00 AM - 9:00 AM	57	81	138
9:00 AM - 10:00 AM	57	94	151
10:00 AM - 11:00 AM	79	103	182
11:00 AM - 12:00 PM	64	91	155
Total	**325**	**477**	**802**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	93	123	216
1:00 PM - 2:00 PM	92	127	219
2:00 PM - 3:00 PM	93	117	210
3:00 PM - 4:00 PM	120	135	255
4:00 PM - 5:00 PM	84	100	184
5:00 PM - 6:00 PM	92	91	183
6:00 PM - 7:00 PM	84	80	164
7:00 PM - 8:00 PM	56	74	130
8:00 PM - 9:00 PM	44	50	94
9:00 PM - 10:00 PM	31	38	69
10:00 PM - 11:00 PM	16	30	46
11:00 PM - 12:00 AM	13	17	30
Total	**818**	**982**	**1,800**

24-Hour	***EB***	***Volume***	***1,143***	***24-Hour***	***WB***	***Volume***	***1,459***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 17. North Ave between West St and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

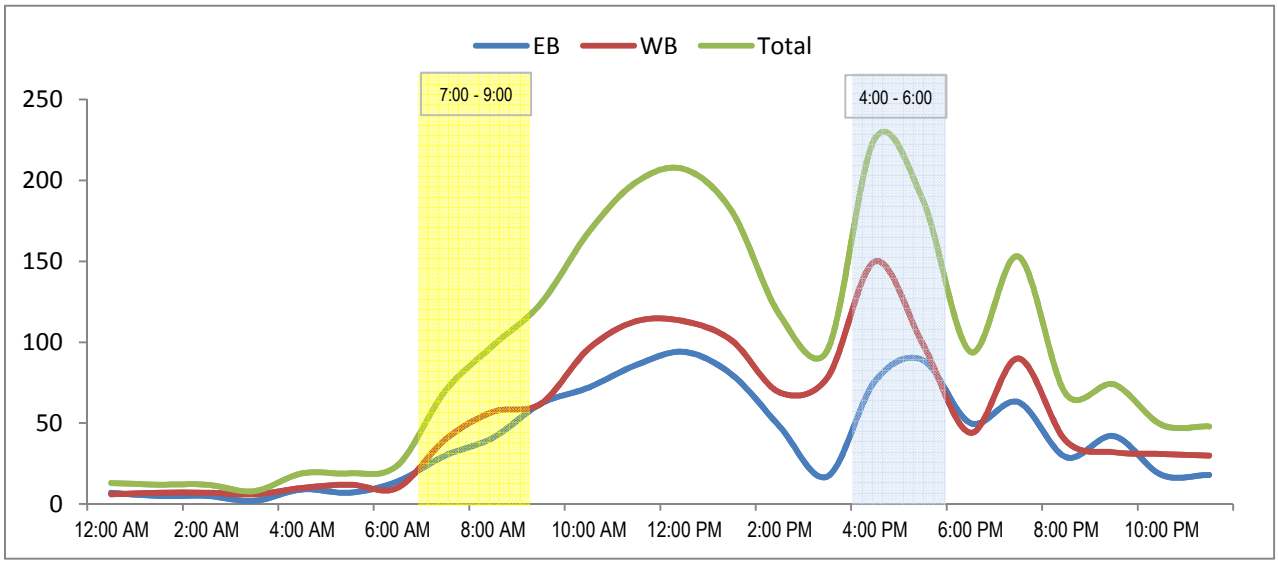
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,266***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	7	6	13
1:00 AM - 2:00 AM	5	7	12
2:00 AM - 3:00 AM	5	7	12
3:00 AM - 4:00 AM	2	6	8
4:00 AM - 5:00 AM	9	10	19
5:00 AM - 6:00 AM	7	12	19
6:00 AM - 7:00 AM	14	10	24
7:00 AM - 8:00 AM	30	40	70
8:00 AM - 9:00 AM	41	57	98
9:00 AM - 10:00 AM	62	62	124
10:00 AM - 11:00 AM	72	96	168
11:00 AM - 12:00 PM	86	113	199
Total	**340**	**426**	**766**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	94	113	207
1:00 PM - 2:00 PM	80	101	181
2:00 PM - 3:00 PM	48	69	117
3:00 PM - 4:00 PM	17	78	95
4:00 PM - 5:00 PM	76	150	226
5:00 PM - 6:00 PM	89	99	188
6:00 PM - 7:00 PM	50	44	94
7:00 PM - 8:00 PM	63	90	153
8:00 PM - 9:00 PM	29	39	68
9:00 PM - 10:00 PM	42	32	74
10:00 PM - 11:00 PM	18	31	49
11:00 PM - 12:00 AM	18	30	48
Total	**624**	**876**	**1,500**

24-Hour	***EB***	***Volume***	***964***	***24-Hour***	***WB***	***Volume***	***1,302***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

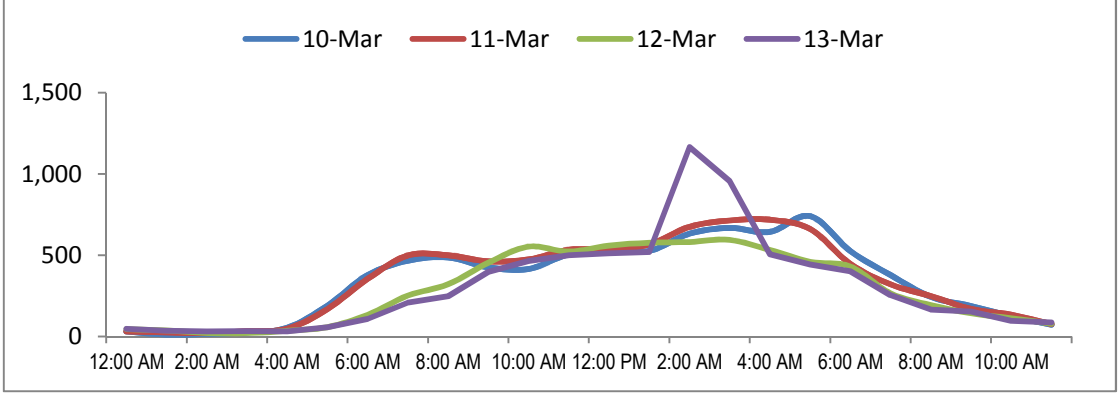
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location:	18. Buena Vista Ave, north of North Ave
Orientation:	*North-South*
Day 1	*Thursday, March 10, 2016*
Day 2	*Friday, March 11, 2016*
Day 3	*Saturday, March 12, 2016*
Day 4	*Sunday, March 13, 2016*
AVC Proj. No:	*16-0493*

Average Daily Traffic	***7,781***
Highest Daily Traffic	***8,425***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	31	31	46	47
1:00 AM - 2:00 AM	12	26	38	35
2:00 AM - 3:00 AM	17	21	22	32
3:00 AM - 4:00 AM	25	33	21	33
4:00 AM - 5:00 AM	54	48	35	32
5:00 AM - 6:00 AM	190	169	58	57
6:00 AM - 7:00 AM	378	355	134	109
7:00 AM - 8:00 AM	467	499	252	208
8:00 AM - 9:00 AM	487	500	322	248
9:00 AM - 10:00 AM	426	463	454	397
10:00 AM - 11:00 AM	416	474	553	465
11:00 AM - 12:00 PM	505	534	523	500
12:00 PM - 1:00 PM	524	538	560	513
1:00 PM - 2:00 PM	527	567	577	520
2:00 PM - 3:00 PM	633	675	582	1,165
3:00 PM - 4:00 PM	668	714	594	958
4:00 PM - 5:00 PM	644	718	533	507
5:00 PM - 6:00 PM	741	662	460	444
6:00 PM - 7:00 PM	526	447	431	402
7:00 PM - 8:00 PM	378	321	266	255
8:00 PM - 9:00 PM	244	249	194	165
9:00 PM - 10:00 PM	188	170	143	154
10:00 PM - 11:00 PM	126	134	113	96
11:00 PM - 12:00 AM	72	77	79	86
Total	**8,279**	**8,425**	**6,990**	**7,428**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 18. Buena Vista Ave, north of North Ave

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

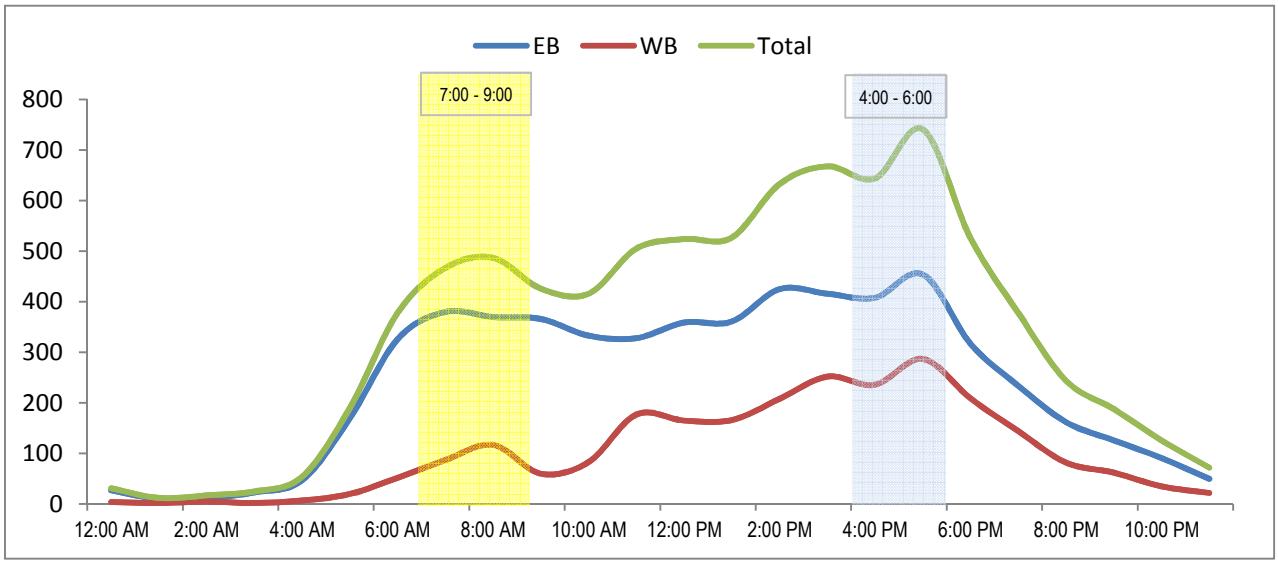
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*8,279*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	27	4	31
1:00 AM - 2:00 AM	10	2	12
2:00 AM - 3:00 AM	12	5	17
3:00 AM - 4:00 AM	23	2	25
4:00 AM - 5:00 AM	47	7	54
5:00 AM - 6:00 AM	170	20	190
6:00 AM - 7:00 AM	326	52	378
7:00 AM - 8:00 AM	380	87	467
8:00 AM - 9:00 AM	370	117	487
9:00 AM - 10:00 AM	366	60	426
10:00 AM - 11:00 AM	333	83	416
11:00 AM - 12:00 PM	328	177	505
Total	**2,392**	**616**	**3,008**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	359	165	524
1:00 PM - 2:00 PM	361	166	527
2:00 PM - 3:00 PM	425	208	633
3:00 PM - 4:00 PM	416	252	668
4:00 PM - 5:00 PM	408	236	644
5:00 PM - 6:00 PM	454	287	741
6:00 PM - 7:00 PM	317	209	526
7:00 PM - 8:00 PM	234	144	378
8:00 PM - 9:00 PM	162	82	244
9:00 PM - 10:00 PM	126	62	188
10:00 PM - 11:00 PM	91	35	126
11:00 PM - 12:00 AM	50	22	72
Total	**3,403**	**1,868**	**5,271**

24-Hour	*EB*	*Volume*	*5,795*	*24-Hour*	*WB*	*Volume*	*2,484*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 18. Buena Vista Ave, north of North Ave

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

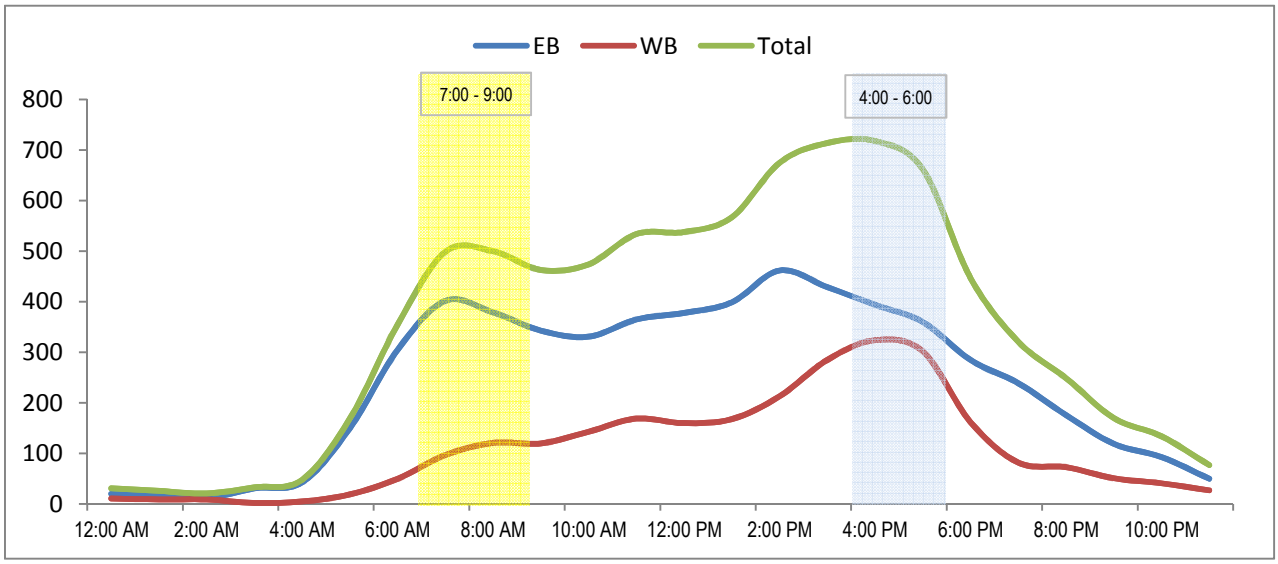
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*8,425*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	20	11	31
1:00 AM - 2:00 AM	17	9	26
2:00 AM - 3:00 AM	12	9	21
3:00 AM - 4:00 AM	31	2	33
4:00 AM - 5:00 AM	43	5	48
5:00 AM - 6:00 AM	150	19	169
6:00 AM - 7:00 AM	305	50	355
7:00 AM - 8:00 AM	402	97	499
8:00 AM - 9:00 AM	379	121	500
9:00 AM - 10:00 AM	343	120	463
10:00 AM - 11:00 AM	331	143	474
11:00 AM - 12:00 PM	365	169	534
Total	**2,398**	**755**	**3,153**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	378	160	538
1:00 PM - 2:00 PM	399	168	567
2:00 PM - 3:00 PM	462	213	675
3:00 PM - 4:00 PM	429	285	714
4:00 PM - 5:00 PM	394	324	718
5:00 PM - 6:00 PM	360	302	662
6:00 PM - 7:00 PM	285	162	447
7:00 PM - 8:00 PM	239	82	321
8:00 PM - 9:00 PM	176	73	249
9:00 PM - 10:00 PM	119	51	170
10:00 PM - 11:00 PM	93	41	134
11:00 PM - 12:00 AM	50	27	77
Total	**3,384**	**1,888**	**5,272**

24-Hour	*EB*	*Volume*	*5,782*	*24-Hour*	*WB*	*Volume*	*2,643*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 18. Buena Vista Ave, north of North Ave

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

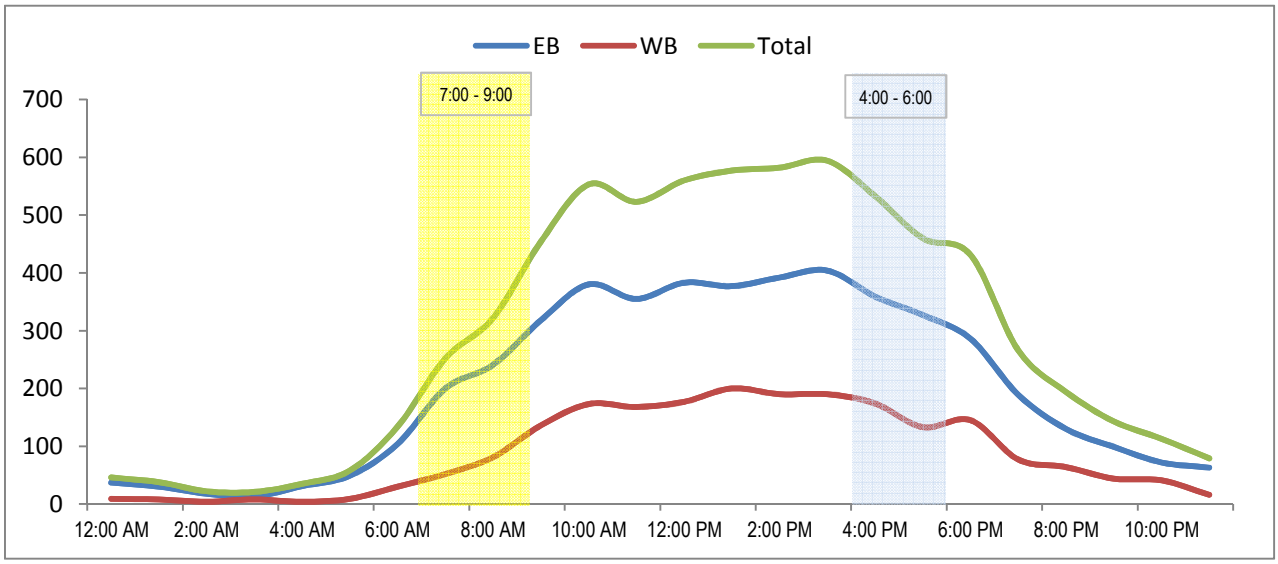
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*6,990*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	37	9	46
1:00 AM - 2:00 AM	30	8	38
2:00 AM - 3:00 AM	18	4	22
3:00 AM - 4:00 AM	13	8	21
4:00 AM - 5:00 AM	31	4	35
5:00 AM - 6:00 AM	49	9	58
6:00 AM - 7:00 AM	104	30	134
7:00 AM - 8:00 AM	200	52	252
8:00 AM - 9:00 AM	241	81	322
9:00 AM - 10:00 AM	318	136	454
10:00 AM - 11:00 AM	380	173	553
11:00 AM - 12:00 PM	355	168	523
Total	**1,776**	**682**	**2,458**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	383	177	560
1:00 PM - 2:00 PM	377	200	577
2:00 PM - 3:00 PM	392	190	582
3:00 PM - 4:00 PM	404	190	594
4:00 PM - 5:00 PM	359	174	533
5:00 PM - 6:00 PM	327	133	460
6:00 PM - 7:00 PM	286	145	431
7:00 PM - 8:00 PM	189	77	266
8:00 PM - 9:00 PM	130	64	194
9:00 PM - 10:00 PM	99	44	143
10:00 PM - 11:00 PM	72	41	113
11:00 PM - 12:00 AM	63	16	79
Total	**3,081**	**1,451**	**4,532**

24-Hour	*EB*	*Volume*	*4,857*	*24-Hour*	*WB*	*Volume*	*2,133*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 18. Buena Vista Ave, north of North Ave

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

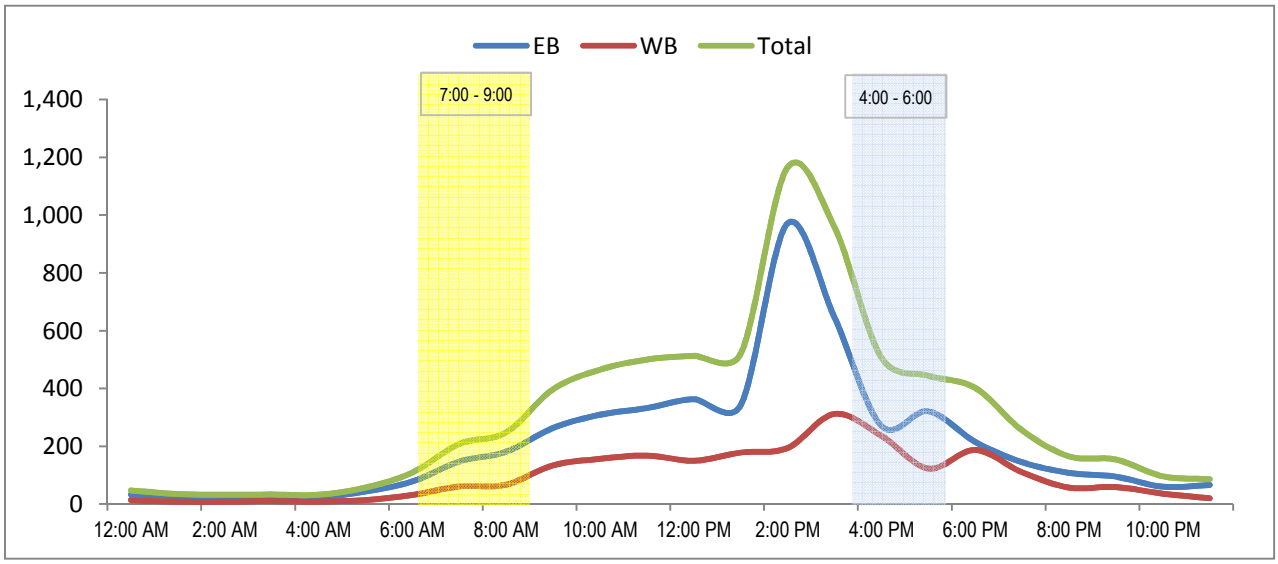
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***7,428***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	33	14	47
1:00 AM - 2:00 AM	27	8	35
2:00 AM - 3:00 AM	24	8	32
3:00 AM - 4:00 AM	23	10	33
4:00 AM - 5:00 AM	24	8	32
5:00 AM - 6:00 AM	43	14	57
6:00 AM - 7:00 AM	78	31	109
7:00 AM - 8:00 AM	147	61	208
8:00 AM - 9:00 AM	181	67	248
9:00 AM - 10:00 AM	263	134	397
10:00 AM - 11:00 AM	309	156	465
11:00 AM - 12:00 PM	332	168	500
Total	**1,484**	**679**	**2,163**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	363	150	513
1:00 PM - 2:00 PM	342	178	520
2:00 PM - 3:00 PM	971	194	1,165
3:00 PM - 4:00 PM	646	312	958
4:00 PM - 5:00 PM	271	236	507
5:00 PM - 6:00 PM	321	123	444
6:00 PM - 7:00 PM	215	187	402
7:00 PM - 8:00 PM	145	110	255
8:00 PM - 9:00 PM	108	57	165
9:00 PM - 10:00 PM	95	59	154
10:00 PM - 11:00 PM	60	36	96
11:00 PM - 12:00 AM	66	20	86
Total	**3,603**	**1,662**	**5,265**

24-Hour	***EB***	***Volume***	***5,087***	***24-Hour***	***WB***	***Volume***	***2,341***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

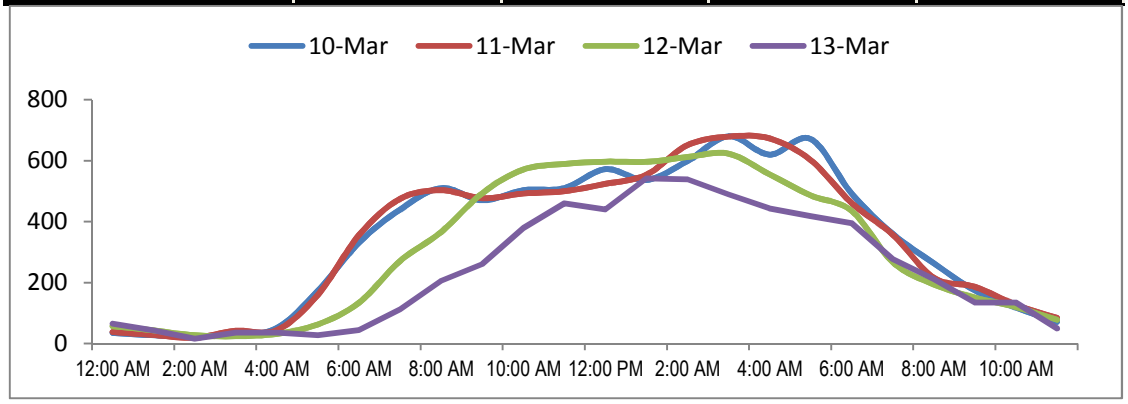
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location:	19. Buena Vista Ave between Lemon Ave and Broadway
Orientation:	*North-South*
Day 1	*Thursday, March 10, 2016*
Day 2	*Friday, March 11, 2016*
Day 3	*Saturday, March 12, 2016*
Day 4	*Sunday, March 13, 2016*
AVC Proj. No:	*16-0493*

Average Daily Traffic	***7,413***
Highest Daily Traffic	***8,261***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	35	38	57	65
1:00 AM - 2:00 AM	27	28	43	43
2:00 AM - 3:00 AM	24	19	27	16
3:00 AM - 4:00 AM	30	42	24	36
4:00 AM - 5:00 AM	51	44	32	36
5:00 AM - 6:00 AM	173	160	63	27
6:00 AM - 7:00 AM	331	356	134	44
7:00 AM - 8:00 AM	440	475	271	113
8:00 AM - 9:00 AM	510	503	366	206
9:00 AM - 10:00 AM	470	477	493	261
10:00 AM - 11:00 AM	503	492	571	379
11:00 AM - 12:00 PM	510	500	589	460
12:00 PM - 1:00 PM	572	524	597	440
1:00 PM - 2:00 PM	537	554	596	542
2:00 PM - 3:00 PM	599	651	612	539
3:00 PM - 4:00 PM	680	679	623	489
4:00 PM - 5:00 PM	620	673	555	443
5:00 PM - 6:00 PM	671	602	486	418
6:00 PM - 7:00 PM	492	461	435	395
7:00 PM - 8:00 PM	360	357	267	277
8:00 PM - 9:00 PM	263	216	194	211
9:00 PM - 10:00 PM	174	186	151	135
10:00 PM - 11:00 PM	118	127	120	135
11:00 PM - 12:00 AM	71	84	78	50
Total	**8,261**	**8,248**	**7,384**	**5,760**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 19. Buena Vista Ave between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

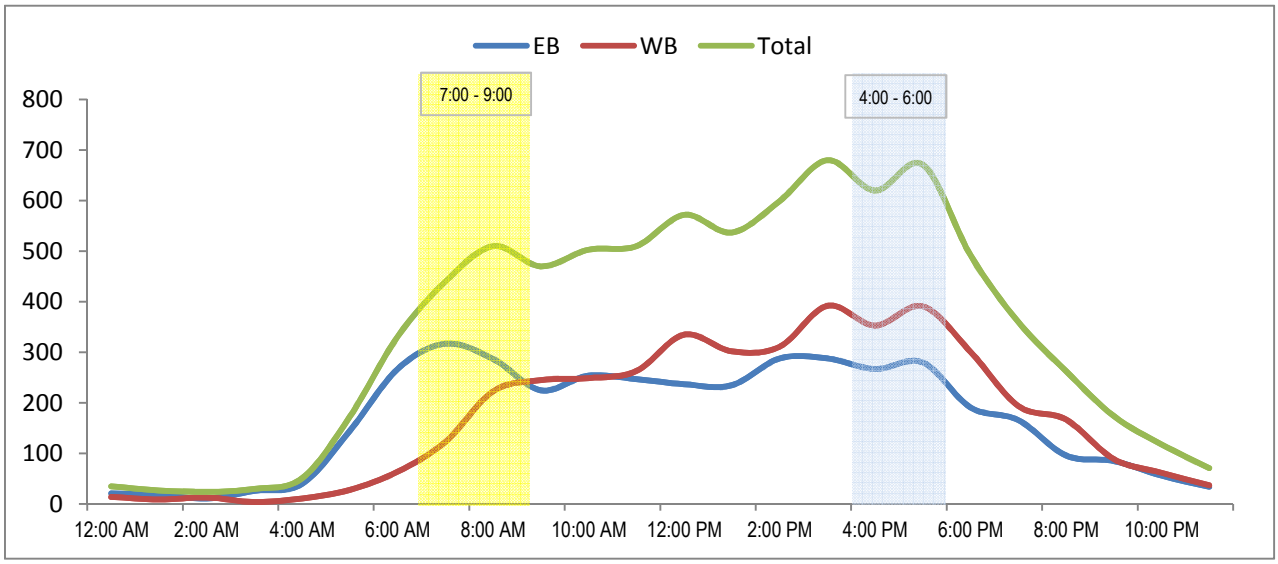
AVC Proj. No: *16-0493*

24 Hour Segment Volume			8,261

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	21	14	35
1:00 AM - 2:00 AM	18	9	27
2:00 AM - 3:00 AM	11	13	24
3:00 AM - 4:00 AM	26	4	30
4:00 AM - 5:00 AM	40	11	51
5:00 AM - 6:00 AM	145	28	173
6:00 AM - 7:00 AM	267	64	331
7:00 AM - 8:00 AM	317	123	440
8:00 AM - 9:00 AM	287	223	510
9:00 AM - 10:00 AM	225	245	470
10:00 AM - 11:00 AM	254	249	503
11:00 AM - 12:00 PM	247	263	510
Total	**1,858**	**1,246**	**3,104**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	237	335	572
1:00 PM - 2:00 PM	235	302	537
2:00 PM - 3:00 PM	288	311	599
3:00 PM - 4:00 PM	288	392	680
4:00 PM - 5:00 PM	267	353	620
5:00 PM - 6:00 PM	280	391	671
6:00 PM - 7:00 PM	191	301	492
7:00 PM - 8:00 PM	166	194	360
8:00 PM - 9:00 PM	96	167	263
9:00 PM - 10:00 PM	85	89	174
10:00 PM - 11:00 PM	56	62	118
11:00 PM - 12:00 AM	34	37	71
Total	**2,223**	**2,934**	**5,157**

24-Hour	*EB*	*Volume*	*4,081*	*24-Hour*	*WB*	*Volume*	*4,180*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 19. Buena Vista Ave between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

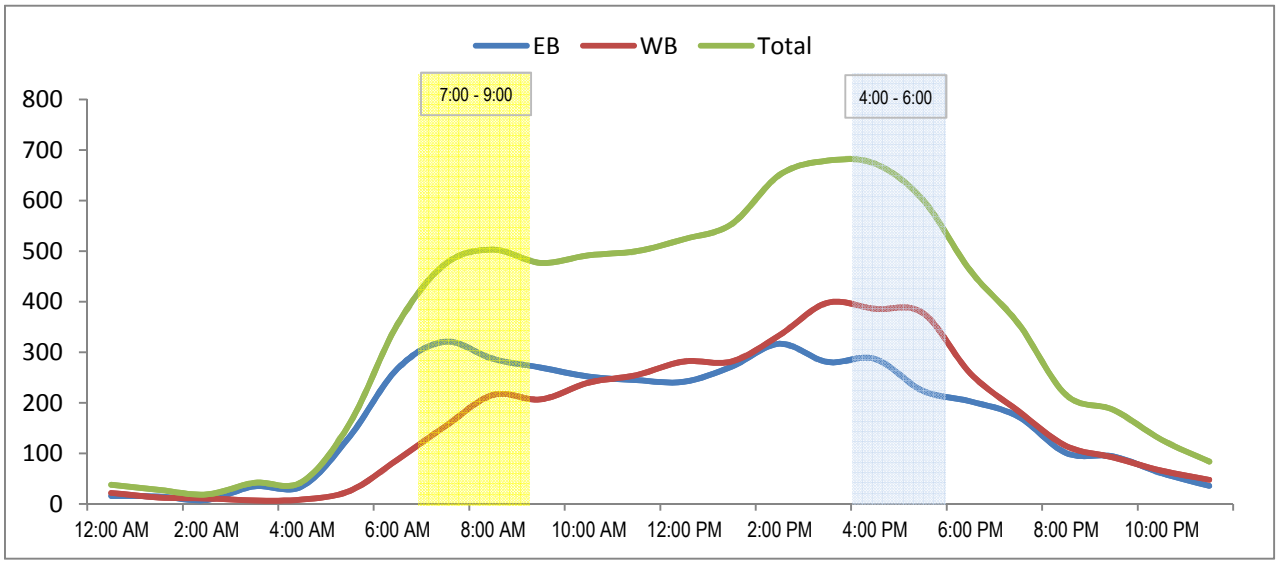
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*8,248*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	16	22	38
1:00 AM - 2:00 AM	15	13	28
2:00 AM - 3:00 AM	8	11	19
3:00 AM - 4:00 AM	35	7	42
4:00 AM - 5:00 AM	35	9	44
5:00 AM - 6:00 AM	134	26	160
6:00 AM - 7:00 AM	268	88	356
7:00 AM - 8:00 AM	321	154	475
8:00 AM - 9:00 AM	287	216	503
9:00 AM - 10:00 AM	270	207	477
10:00 AM - 11:00 AM	252	240	492
11:00 AM - 12:00 PM	245	255	500
Total	**1,886**	**1,248**	**3,134**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	242	282	524
1:00 PM - 2:00 PM	272	282	554
2:00 PM - 3:00 PM	317	334	651
3:00 PM - 4:00 PM	281	398	679
4:00 PM - 5:00 PM	287	386	673
5:00 PM - 6:00 PM	224	378	602
6:00 PM - 7:00 PM	203	258	461
7:00 PM - 8:00 PM	173	184	357
8:00 PM - 9:00 PM	101	115	216
9:00 PM - 10:00 PM	94	92	186
10:00 PM - 11:00 PM	61	66	127
11:00 PM - 12:00 AM	36	48	84
Total	**2,291**	**2,823**	**5,114**

24-Hour	*EB*	*Volume*	*4,177*	*24-Hour*	*WB*	*Volume*	*4,071*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 19. Buena Vista Ave between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

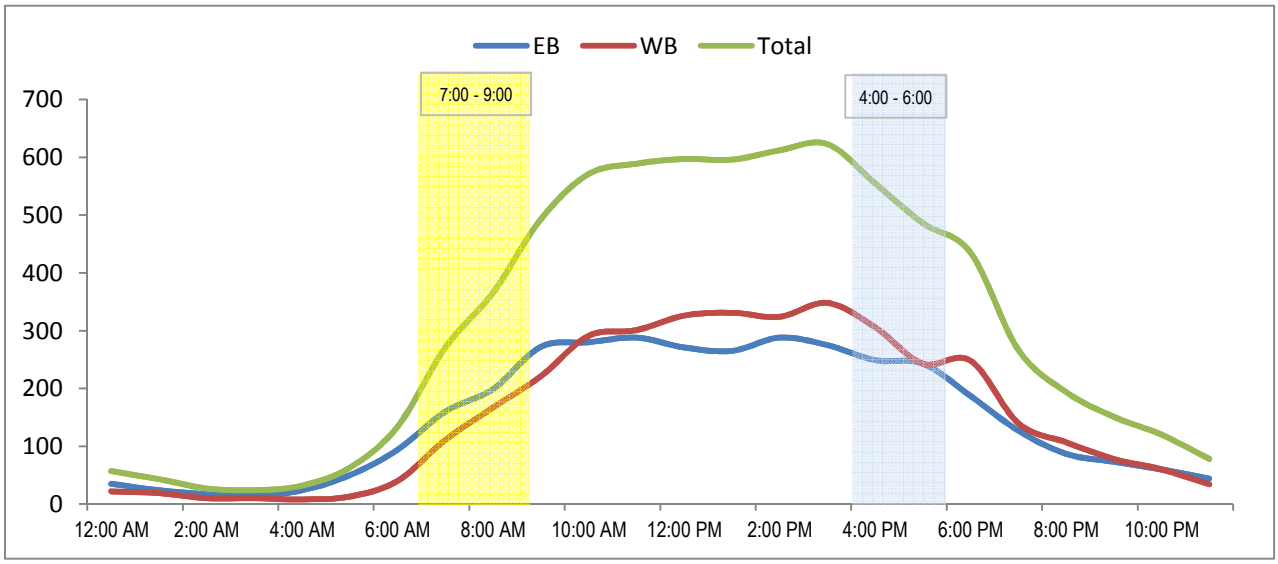
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***7,384***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	35	22	57
1:00 AM - 2:00 AM	24	19	43
2:00 AM - 3:00 AM	17	10	27
3:00 AM - 4:00 AM	14	10	24
4:00 AM - 5:00 AM	24	8	32
5:00 AM - 6:00 AM	50	13	63
6:00 AM - 7:00 AM	94	40	134
7:00 AM - 8:00 AM	160	111	271
8:00 AM - 9:00 AM	199	167	366
9:00 AM - 10:00 AM	272	221	493
10:00 AM - 11:00 AM	280	291	571
11:00 AM - 12:00 PM	288	301	589
Total	**1,457**	**1,213**	**2,670**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	271	326	597
1:00 PM - 2:00 PM	265	331	596
2:00 PM - 3:00 PM	288	324	612
3:00 PM - 4:00 PM	275	348	623
4:00 PM - 5:00 PM	249	306	555
5:00 PM - 6:00 PM	243	243	486
6:00 PM - 7:00 PM	187	248	435
7:00 PM - 8:00 PM	127	140	267
8:00 PM - 9:00 PM	87	107	194
9:00 PM - 10:00 PM	73	78	151
10:00 PM - 11:00 PM	60	60	120
11:00 PM - 12:00 AM	44	34	78
Total	**2,169**	**2,545**	**4,714**

24-Hour	***EB***	***Volume***	***3,626***	***24-Hour***	***WB***	***Volume***	***3,758***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 19. Buena Vista Ave between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

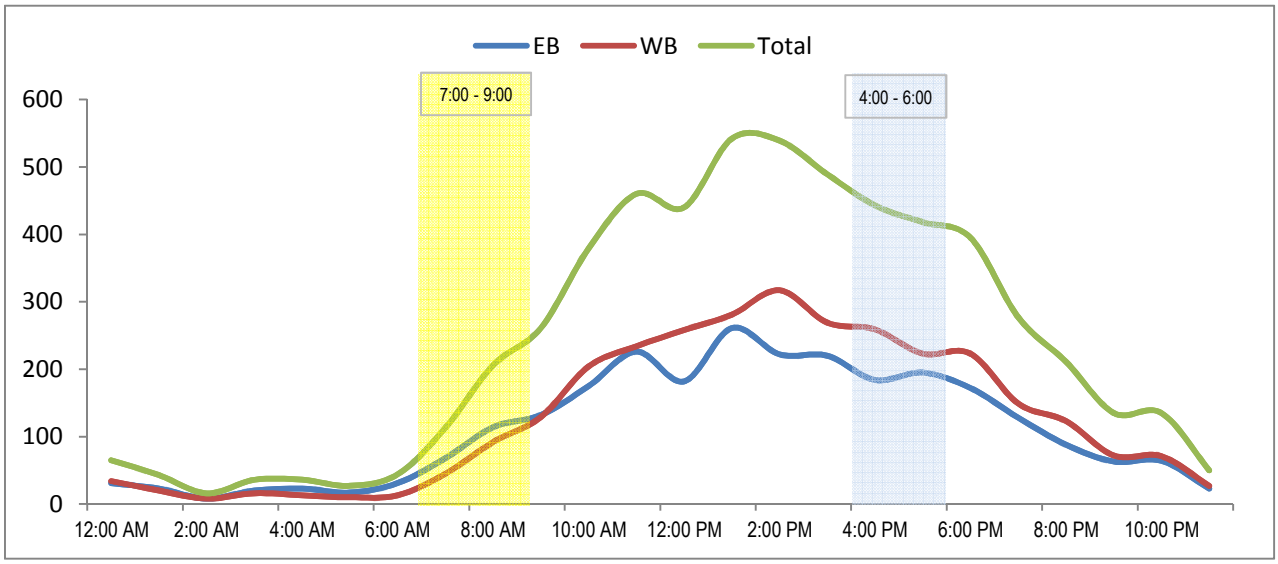
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,760*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	31	34	65
1:00 AM - 2:00 AM	23	20	43
2:00 AM - 3:00 AM	8	8	16
3:00 AM - 4:00 AM	20	16	36
4:00 AM - 5:00 AM	23	13	36
5:00 AM - 6:00 AM	17	10	27
6:00 AM - 7:00 AM	31	13	44
7:00 AM - 8:00 AM	68	45	113
8:00 AM - 9:00 AM	114	92	206
9:00 AM - 10:00 AM	132	129	261
10:00 AM - 11:00 AM	175	204	379
11:00 AM - 12:00 PM	226	234	460
Total	**868**	**818**	**1,686**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	182	258	440
1:00 PM - 2:00 PM	261	281	542
2:00 PM - 3:00 PM	222	317	539
3:00 PM - 4:00 PM	220	269	489
4:00 PM - 5:00 PM	184	259	443
5:00 PM - 6:00 PM	195	223	418
6:00 PM - 7:00 PM	172	223	395
7:00 PM - 8:00 PM	128	149	277
8:00 PM - 9:00 PM	88	123	211
9:00 PM - 10:00 PM	63	72	135
10:00 PM - 11:00 PM	64	71	135
11:00 PM - 12:00 AM	23	27	50
Total	**1,802**	**2,272**	**4,074**

24-Hour	*EB*	*Volume*	*2,670*	*24-Hour*	*WB*	*Volume*	*3,090*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

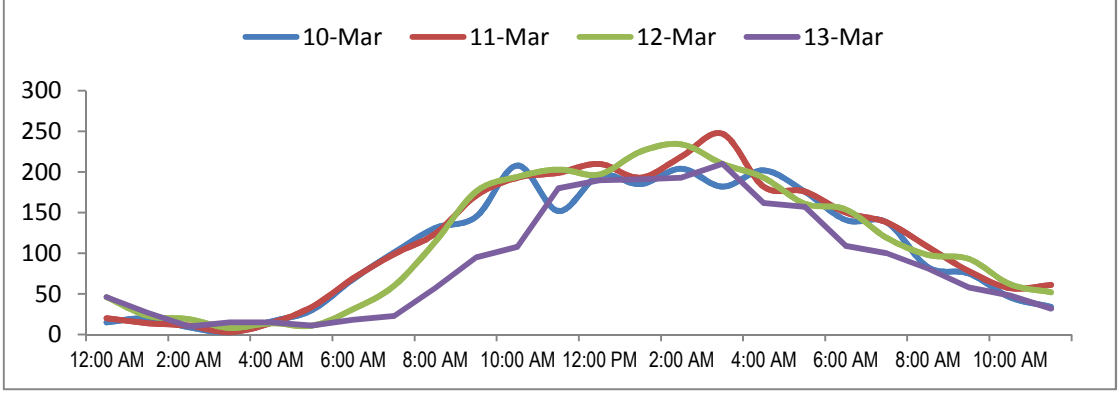
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 20. Olive St between Lemon Ave and Broadway
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***2,541***
Highest Daily Traffic	***2,770***

Time			Hourly Volume			
			10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM	-	1:00 AM	15	20	46	46
1:00 AM	-	2:00 AM	20	14	23	27
2:00 AM	-	3:00 AM	9	11	19	10
3:00 AM	-	4:00 AM	3	3	8	15
4:00 AM	-	5:00 AM	16	14	14	15
5:00 AM	-	6:00 AM	30	34	11	11
6:00 AM	-	7:00 AM	68	69	31	18
7:00 AM	-	8:00 AM	101	99	60	23
8:00 AM	-	9:00 AM	131	124	114	57
9:00 AM	-	10:00 AM	145	171	176	95
10:00 AM	-	11:00 AM	208	193	194	108
11:00 AM	-	12:00 PM	152	199	203	180
12:00 PM	-	1:00 PM	196	210	197	190
1:00 PM	-	2:00 PM	185	193	225	191
2:00 PM	-	3:00 PM	204	219	234	193
3:00 PM	-	4:00 PM	182	247	210	210
4:00 PM	-	5:00 PM	202	182	193	162
5:00 PM	-	6:00 PM	176	176	161	157
6:00 PM	-	7:00 PM	141	150	154	109
7:00 PM	-	8:00 PM	138	138	119	100
8:00 PM	-	9:00 PM	83	108	98	81
9:00 PM	-	10:00 PM	75	78	93	58
10:00 PM	-	11:00 PM	46	57	62	48
11:00 PM	-	12:00 AM	34	61	52	32
Total			**2,560**	**2,770**	**2,697**	**2,136**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 20. Olive St between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

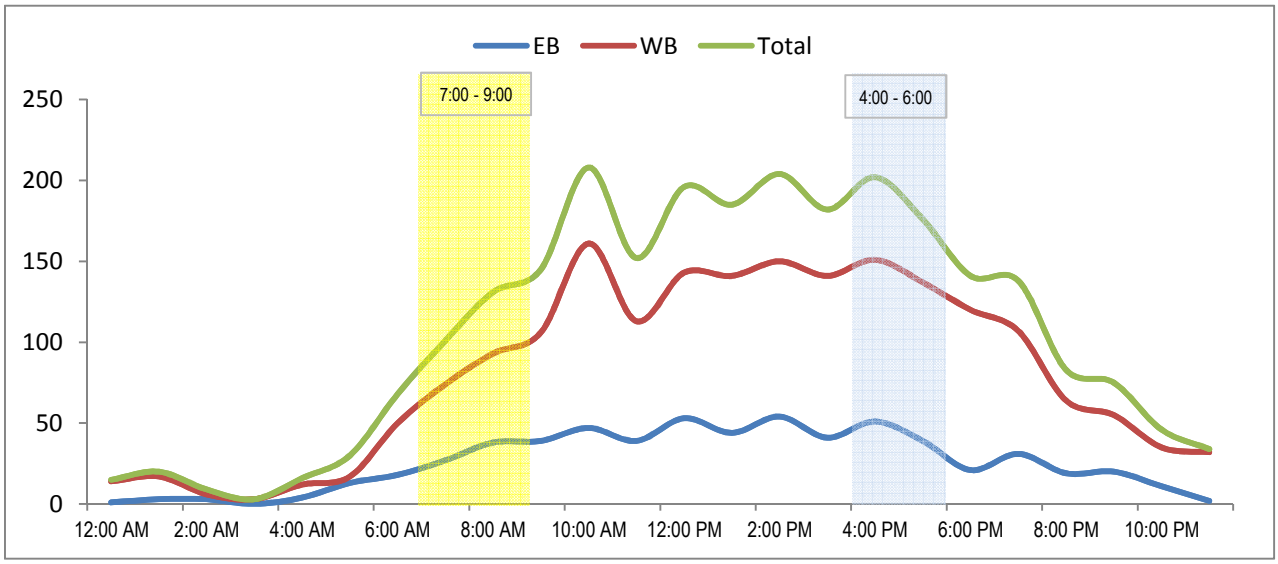
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,560***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	14	15
1:00 AM - 2:00 AM	3	17	20
2:00 AM - 3:00 AM	3	6	9
3:00 AM - 4:00 AM	0	3	3
4:00 AM - 5:00 AM	4	12	16
5:00 AM - 6:00 AM	13	17	30
6:00 AM - 7:00 AM	18	50	68
7:00 AM - 8:00 AM	27	74	101
8:00 AM - 9:00 AM	38	93	131
9:00 AM - 10:00 AM	39	106	145
10:00 AM - 11:00 AM	47	161	208
11:00 AM - 12:00 PM	39	113	152
Total	**232**	**666**	**898**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	53	143	196
1:00 PM - 2:00 PM	44	141	185
2:00 PM - 3:00 PM	54	150	204
3:00 PM - 4:00 PM	41	141	182
4:00 PM - 5:00 PM	51	151	202
5:00 PM - 6:00 PM	39	137	176
6:00 PM - 7:00 PM	21	120	141
7:00 PM - 8:00 PM	31	107	138
8:00 PM - 9:00 PM	19	64	83
9:00 PM - 10:00 PM	20	55	75
10:00 PM - 11:00 PM	11	35	46
11:00 PM - 12:00 AM	2	32	34
Total	**386**	**1,276**	**1,662**

24-Hour EB Volume	***618***	***24-Hour WB Volume***	***1,942***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 20. Olive St between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

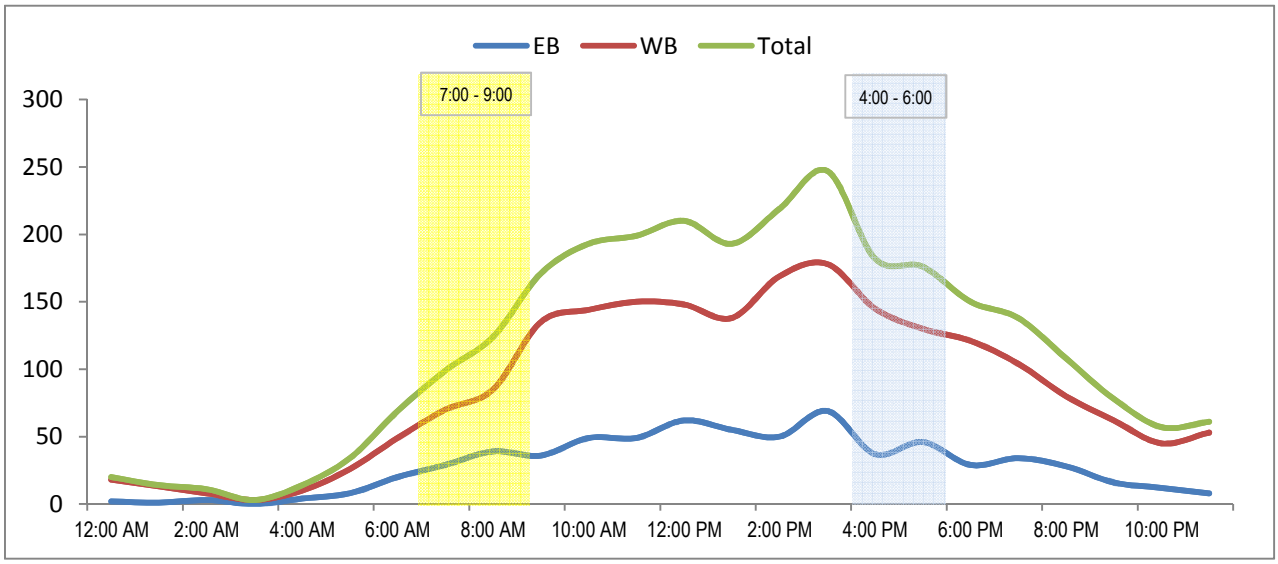
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*2,770*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	18	20
1:00 AM - 2:00 AM	1	13	14
2:00 AM - 3:00 AM	3	8	11
3:00 AM - 4:00 AM	0	3	3
4:00 AM - 5:00 AM	4	10	14
5:00 AM - 6:00 AM	8	26	34
6:00 AM - 7:00 AM	20	49	69
7:00 AM - 8:00 AM	29	70	99
8:00 AM - 9:00 AM	39	85	124
9:00 AM - 10:00 AM	36	135	171
10:00 AM - 11:00 AM	49	144	193
11:00 AM - 12:00 PM	49	150	199
Total	**240**	**711**	**951**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	62	148	210
1:00 PM - 2:00 PM	55	138	193
2:00 PM - 3:00 PM	50	169	219
3:00 PM - 4:00 PM	69	178	247
4:00 PM - 5:00 PM	37	145	182
5:00 PM - 6:00 PM	46	130	176
6:00 PM - 7:00 PM	29	121	150
7:00 PM - 8:00 PM	34	104	138
8:00 PM - 9:00 PM	28	80	108
9:00 PM - 10:00 PM	16	62	78
10:00 PM - 11:00 PM	12	45	57
11:00 PM - 12:00 AM	8	53	61
Total	**446**	**1,373**	**1,819**

24-Hour	*EB*	*Volume*	*686*	*24-Hour*	*WB*	*Volume*	*2,084*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 20. Olive St between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

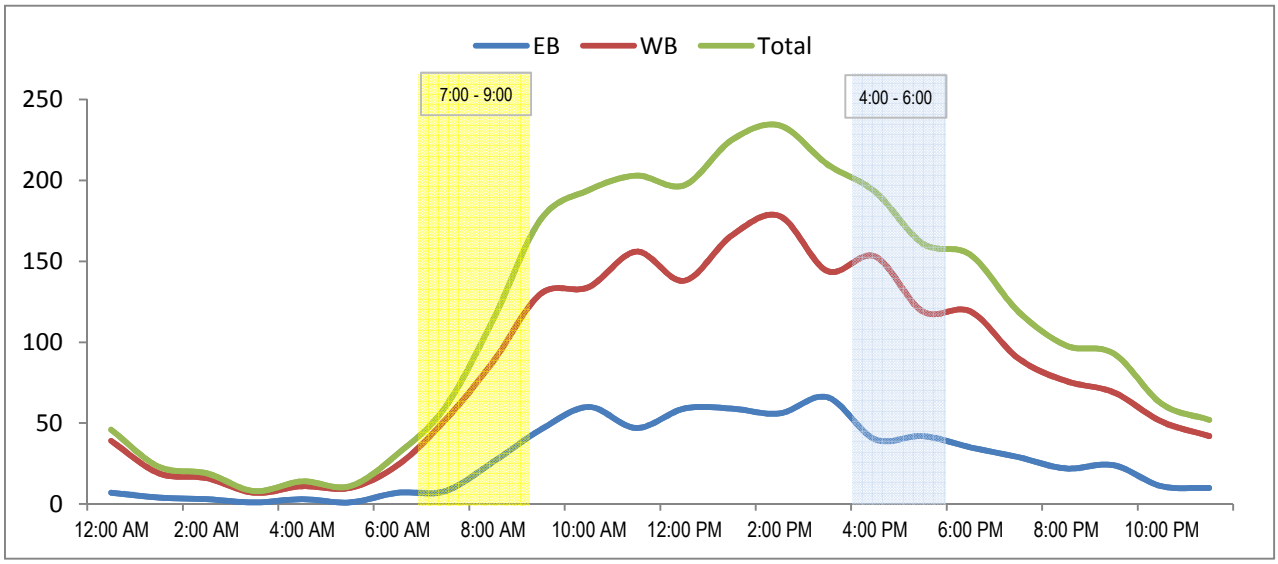
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,697***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	7	39	46
1:00 AM - 2:00 AM	4	19	23
2:00 AM - 3:00 AM	3	16	19
3:00 AM - 4:00 AM	1	7	8
4:00 AM - 5:00 AM	3	11	14
5:00 AM - 6:00 AM	1	10	11
6:00 AM - 7:00 AM	7	24	31
7:00 AM - 8:00 AM	8	52	60
8:00 AM - 9:00 AM	26	88	114
9:00 AM - 10:00 AM	46	130	176
10:00 AM - 11:00 AM	60	134	194
11:00 AM - 12:00 PM	47	156	203
Total	**213**	**686**	**899**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	59	138	197
1:00 PM - 2:00 PM	59	166	225
2:00 PM - 3:00 PM	56	178	234
3:00 PM - 4:00 PM	66	144	210
4:00 PM - 5:00 PM	40	153	193
5:00 PM - 6:00 PM	42	119	161
6:00 PM - 7:00 PM	35	119	154
7:00 PM - 8:00 PM	29	90	119
8:00 PM - 9:00 PM	22	76	98
9:00 PM - 10:00 PM	24	69	93
10:00 PM - 11:00 PM	11	51	62
11:00 PM - 12:00 AM	10	42	52
Total	**453**	**1,345**	**1,798**

24-Hour EB Volume	***666***	***24-Hour WB Volume***	***2,031***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 20. Olive St between Lemon Ave and Broadway

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

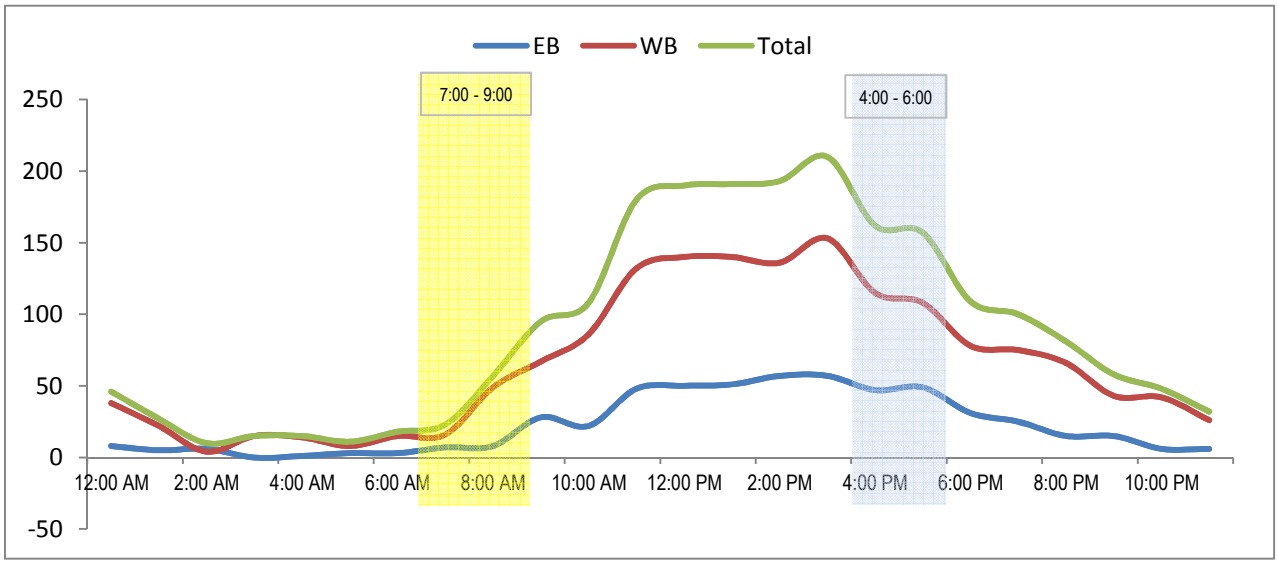
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,136***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	8	38	46
1:00 AM - 2:00 AM	5	22	27
2:00 AM - 3:00 AM	6	4	10
3:00 AM - 4:00 AM	0	15	15
4:00 AM - 5:00 AM	1	14	15
5:00 AM - 6:00 AM	3	8	11
6:00 AM - 7:00 AM	3	15	18
7:00 AM - 8:00 AM	7	16	23
8:00 AM - 9:00 AM	8	49	57
9:00 AM - 10:00 AM	28	67	95
10:00 AM - 11:00 AM	22	86	108
11:00 AM - 12:00 PM	48	132	180
Total	**139**	**466**	**605**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	50	140	190
1:00 PM - 2:00 PM	51	140	191
2:00 PM - 3:00 PM	57	136	193
3:00 PM - 4:00 PM	57	153	210
4:00 PM - 5:00 PM	47	115	162
5:00 PM - 6:00 PM	49	108	157
6:00 PM - 7:00 PM	31	78	109
7:00 PM - 8:00 PM	25	75	100
8:00 PM - 9:00 PM	15	66	81
9:00 PM - 10:00 PM	15	43	58
10:00 PM - 11:00 PM	6	42	48
11:00 PM - 12:00 AM	6	26	32
Total	**409**	**1,122**	**1,531**

24-Hour	***EB***	***Volume***	***548***	***24-Hour***	***WB***	***Volume***	***1,588***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

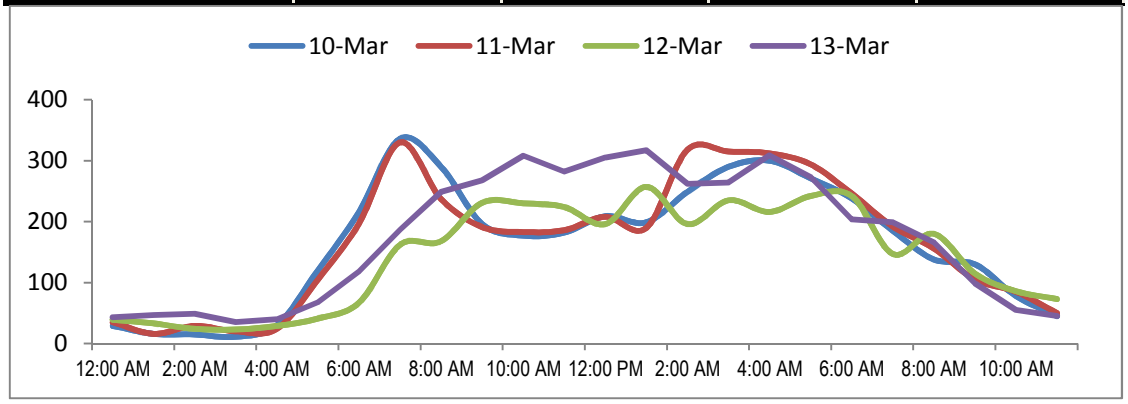
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 21. Lemon Grove Ave, east of Grove Ct
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***3,906***
Highest Daily Traffic	***4,192***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	29	35	39	43
1:00 AM - 2:00 AM	16	16	33	47
2:00 AM - 3:00 AM	15	29	24	49
3:00 AM - 4:00 AM	11	20	23	35
4:00 AM - 5:00 AM	30	24	29	40
5:00 AM - 6:00 AM	120	105	41	68
6:00 AM - 7:00 AM	216	197	67	118
7:00 AM - 8:00 AM	336	330	162	187
8:00 AM - 9:00 AM	290	237	168	249
9:00 AM - 10:00 AM	196	191	231	268
10:00 AM - 11:00 AM	177	183	230	308
11:00 AM - 12:00 PM	182	186	224	282
12:00 PM - 1:00 PM	209	208	196	305
1:00 PM - 2:00 PM	199	190	257	317
2:00 PM - 3:00 PM	249	318	196	262
3:00 PM - 4:00 PM	290	315	235	264
4:00 PM - 5:00 PM	300	312	216	309
5:00 PM - 6:00 PM	271	294	242	273
6:00 PM - 7:00 PM	238	246	242	204
7:00 PM - 8:00 PM	185	192	147	199
8:00 PM - 9:00 PM	138	156	180	166
9:00 PM - 10:00 PM	130	105	115	99
10:00 PM - 11:00 PM	78	85	86	55
11:00 PM - 12:00 AM	45	50	73	45
Total	**3,950**	**4,024**	**3,456**	**4,192**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 21. Lemon Grove Ave, east of Grove Ct

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

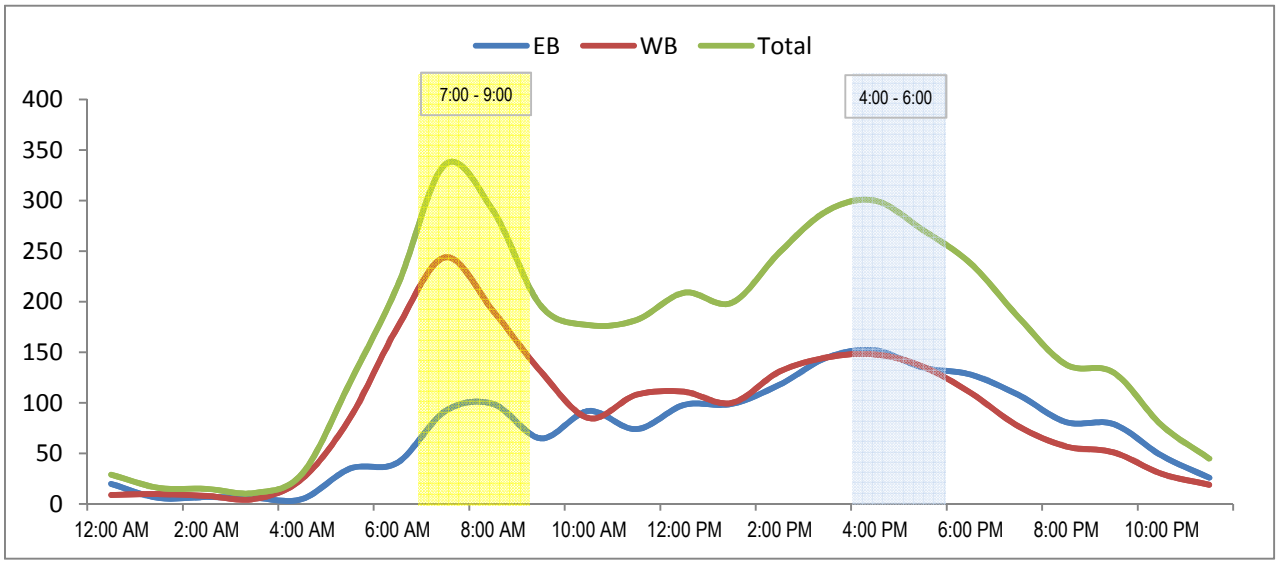
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*3,950*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	20	9	29
1:00 AM - 2:00 AM	6	10	16
2:00 AM - 3:00 AM	7	8	15
3:00 AM - 4:00 AM	6	5	11
4:00 AM - 5:00 AM	5	25	30
5:00 AM - 6:00 AM	35	85	120
6:00 AM - 7:00 AM	41	175	216
7:00 AM - 8:00 AM	92	244	336
8:00 AM - 9:00 AM	99	191	290
9:00 AM - 10:00 AM	65	131	196
10:00 AM - 11:00 AM	92	85	177
11:00 AM - 12:00 PM	74	108	182
Total	**542**	**1,076**	**1,618**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	98	111	209
1:00 PM - 2:00 PM	99	100	199
2:00 PM - 3:00 PM	118	131	249
3:00 PM - 4:00 PM	145	145	290
4:00 PM - 5:00 PM	152	148	300
5:00 PM - 6:00 PM	135	136	271
6:00 PM - 7:00 PM	128	110	238
7:00 PM - 8:00 PM	108	77	185
8:00 PM - 9:00 PM	81	57	138
9:00 PM - 10:00 PM	79	51	130
10:00 PM - 11:00 PM	48	30	78
11:00 PM - 12:00 AM	26	19	45
Total	**1,217**	**1,115**	**2,332**

24-Hour	*EB*	*Volume*	*1,759*	*24-Hour*	*WB*	*Volume*	*2,191*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 21. Lemon Grove Ave, east of Grove Ct

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

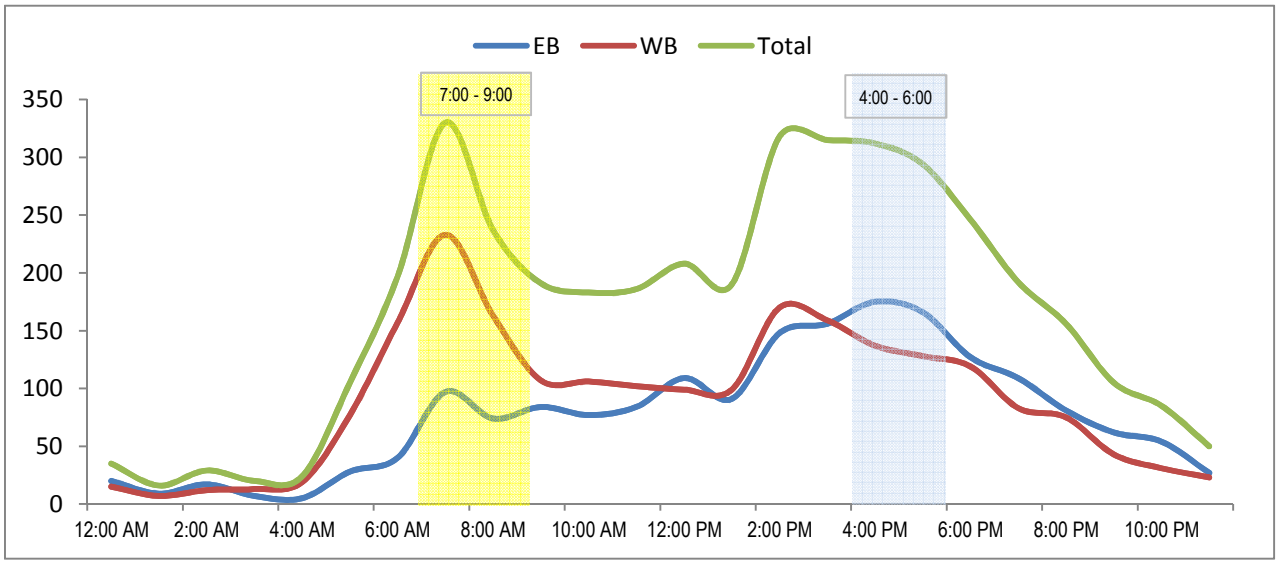
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,024*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	20	15	35
1:00 AM - 2:00 AM	9	7	16
2:00 AM - 3:00 AM	17	12	29
3:00 AM - 4:00 AM	7	13	20
4:00 AM - 5:00 AM	5	19	24
5:00 AM - 6:00 AM	28	77	105
6:00 AM - 7:00 AM	40	157	197
7:00 AM - 8:00 AM	97	233	330
8:00 AM - 9:00 AM	74	163	237
9:00 AM - 10:00 AM	84	107	191
10:00 AM - 11:00 AM	77	106	183
11:00 AM - 12:00 PM	84	102	186
Total	**542**	**1,011**	**1,553**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	109	99	208
1:00 PM - 2:00 PM	91	99	190
2:00 PM - 3:00 PM	148	170	318
3:00 PM - 4:00 PM	156	159	315
4:00 PM - 5:00 PM	175	137	312
5:00 PM - 6:00 PM	166	128	294
6:00 PM - 7:00 PM	127	119	246
7:00 PM - 8:00 PM	109	83	192
8:00 PM - 9:00 PM	81	75	156
9:00 PM - 10:00 PM	62	43	105
10:00 PM - 11:00 PM	54	31	85
11:00 PM - 12:00 AM	27	23	50
Total	**1,305**	**1,166**	**2,471**

24-Hour	*EB*	*Volume*	*1,847*	*24-Hour*	*WB*	*Volume*	*2,177*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 21. Lemon Grove Ave, east of Grove Ct

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

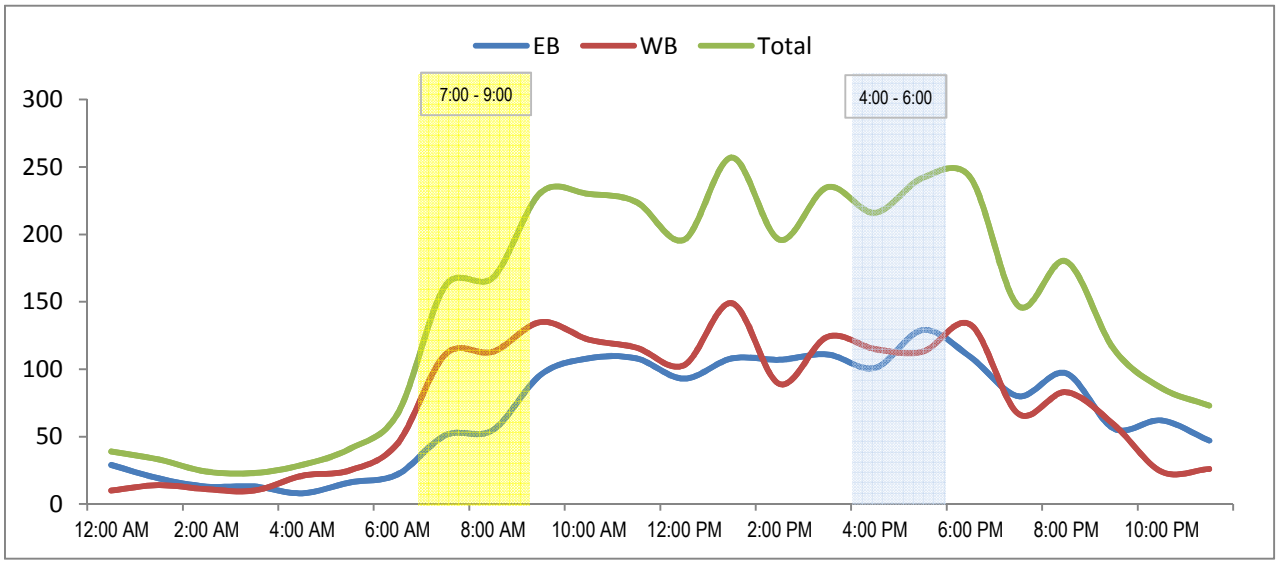
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*3,456*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	29	10	39
1:00 AM - 2:00 AM	19	14	33
2:00 AM - 3:00 AM	13	11	24
3:00 AM - 4:00 AM	13	10	23
4:00 AM - 5:00 AM	8	21	29
5:00 AM - 6:00 AM	16	25	41
6:00 AM - 7:00 AM	22	45	67
7:00 AM - 8:00 AM	51	111	162
8:00 AM - 9:00 AM	55	113	168
9:00 AM - 10:00 AM	96	135	231
10:00 AM - 11:00 AM	108	122	230
11:00 AM - 12:00 PM	108	116	224
Total	**538**	**733**	**1,271**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	93	103	196
1:00 PM - 2:00 PM	108	149	257
2:00 PM - 3:00 PM	107	89	196
3:00 PM - 4:00 PM	111	124	235
4:00 PM - 5:00 PM	101	115	216
5:00 PM - 6:00 PM	129	113	242
6:00 PM - 7:00 PM	109	133	242
7:00 PM - 8:00 PM	80	67	147
8:00 PM - 9:00 PM	97	83	180
9:00 PM - 10:00 PM	56	59	115
10:00 PM - 11:00 PM	62	24	86
11:00 PM - 12:00 AM	47	26	73
Total	**1,100**	**1,085**	**2,185**

24-Hour	*EB*	*Volume*	*1,638*	*24-Hour*	*WB*	*Volume*	*1,818*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 21. Lemon Grove Ave, east of Grove Ct

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

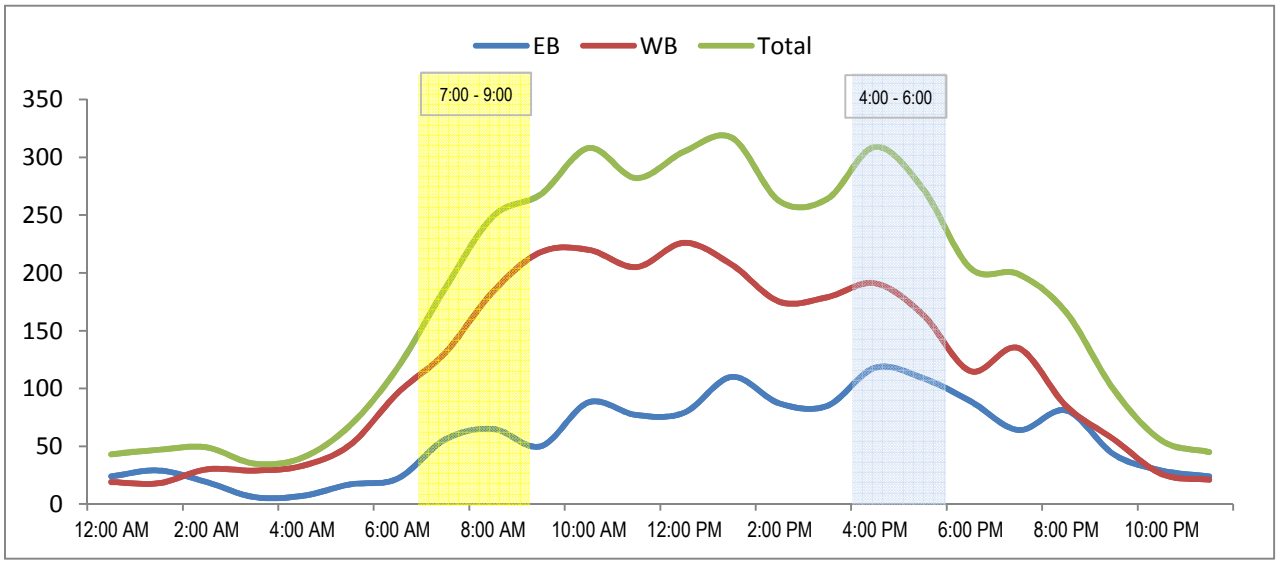
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,192*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	24	19	43
1:00 AM - 2:00 AM	29	18	47
2:00 AM - 3:00 AM	19	30	49
3:00 AM - 4:00 AM	6	29	35
4:00 AM - 5:00 AM	7	33	40
5:00 AM - 6:00 AM	17	51	68
6:00 AM - 7:00 AM	22	96	118
7:00 AM - 8:00 AM	56	131	187
8:00 AM - 9:00 AM	65	184	249
9:00 AM - 10:00 AM	50	218	268
10:00 AM - 11:00 AM	88	220	308
11:00 AM - 12:00 PM	77	205	282
Total	**460**	**1,234**	**1,694**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	79	226	305
1:00 PM - 2:00 PM	110	207	317
2:00 PM - 3:00 PM	87	175	262
3:00 PM - 4:00 PM	85	179	264
4:00 PM - 5:00 PM	118	191	309
5:00 PM - 6:00 PM	109	164	273
6:00 PM - 7:00 PM	89	115	204
7:00 PM - 8:00 PM	64	135	199
8:00 PM - 9:00 PM	81	85	166
9:00 PM - 10:00 PM	43	56	99
10:00 PM - 11:00 PM	29	26	55
11:00 PM - 12:00 AM	24	21	45
Total	**918**	**1,580**	**2,498**

24-Hour	*EB*	*Volume*	*1,378*	*24-Hour*	*WB*	*Volume*	*2,814*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

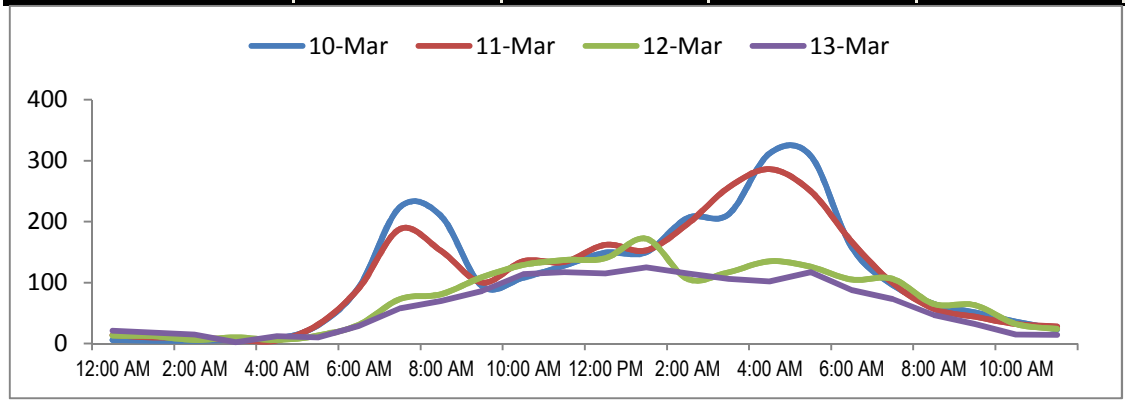
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location:	22. Grove St, north of Lemon Grove Way
Orientation:	*North-South*
Day 1	*Thursday, March 10, 2016*
Day 2	*Friday, March 11, 2016*
Day 3	*Saturday, March 12, 2016*
Day 4	*Sunday, March 13, 2016*
AVC Proj. No:	*16-0493*

Average Daily Traffic	***2,150***
Highest Daily Traffic	***2,682***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	6	14	13	21
1:00 AM - 2:00 AM	5	10	12	18
2:00 AM - 3:00 AM	5	10	6	15
3:00 AM - 4:00 AM	6	6	10	2
4:00 AM - 5:00 AM	8	5	6	12
5:00 AM - 6:00 AM	30	31	13	10
6:00 AM - 7:00 AM	93	91	31	29
7:00 AM - 8:00 AM	224	188	73	58
8:00 AM - 9:00 AM	209	152	81	70
9:00 AM - 10:00 AM	94	100	109	86
10:00 AM - 11:00 AM	108	135	129	114
11:00 AM - 12:00 PM	128	134	137	117
12:00 PM - 1:00 PM	149	162	140	115
1:00 PM - 2:00 PM	150	153	172	125
2:00 PM - 3:00 PM	206	196	106	115
3:00 PM - 4:00 PM	212	256	117	106
4:00 PM - 5:00 PM	312	286	135	102
5:00 PM - 6:00 PM	308	250	126	117
6:00 PM - 7:00 PM	158	167	105	88
7:00 PM - 8:00 PM	96	99	106	73
8:00 PM - 9:00 PM	65	57	65	47
9:00 PM - 10:00 PM	51	44	63	32
10:00 PM - 11:00 PM	36	32	32	15
11:00 PM - 12:00 AM	23	28	24	14
Total	**2,682**	**2,606**	**1,811**	**1,501**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 22. Grove St, north of Lemon Grove Way

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

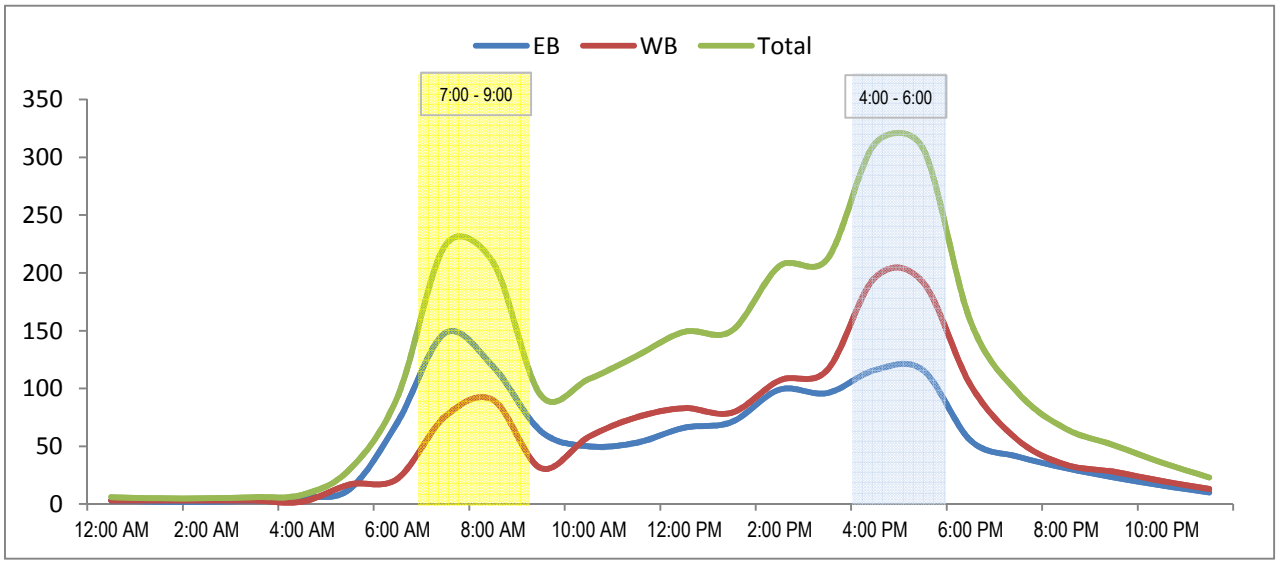
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*2,682*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	3	3	6
1:00 AM - 2:00 AM	2	3	5
2:00 AM - 3:00 AM	2	3	5
3:00 AM - 4:00 AM	3	3	6
4:00 AM - 5:00 AM	6	2	8
5:00 AM - 6:00 AM	13	17	30
6:00 AM - 7:00 AM	71	22	93
7:00 AM - 8:00 AM	148	76	224
8:00 AM - 9:00 AM	119	90	209
9:00 AM - 10:00 AM	63	31	94
10:00 AM - 11:00 AM	50	58	108
11:00 AM - 12:00 PM	53	75	128
Total	**533**	**383**	**916**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	66	83	149
1:00 PM - 2:00 PM	71	79	150
2:00 PM - 3:00 PM	99	107	206
3:00 PM - 4:00 PM	96	116	212
4:00 PM - 5:00 PM	116	196	312
5:00 PM - 6:00 PM	116	192	308
6:00 PM - 7:00 PM	55	103	158
7:00 PM - 8:00 PM	41	55	96
8:00 PM - 9:00 PM	31	34	65
9:00 PM - 10:00 PM	23	28	51
10:00 PM - 11:00 PM	16	20	36
11:00 PM - 12:00 AM	10	13	23
Total	**740**	**1,026**	**1,766**

24-Hour	*EB*	*Volume*	*1,273*	*24-Hour*	*WB*	*Volume*	*1,409*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 22. Grove St, north of Lemon Grove Way

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

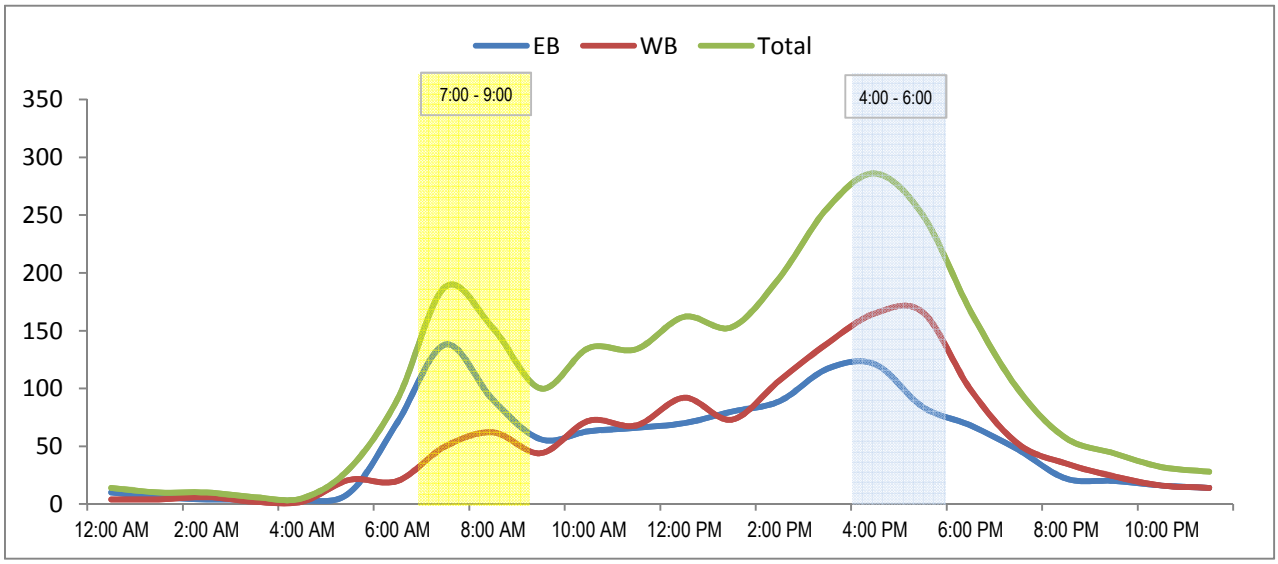
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*2,606*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	4	14
1:00 AM - 2:00 AM	6	4	10
2:00 AM - 3:00 AM	4	6	10
3:00 AM - 4:00 AM	4	2	6
4:00 AM - 5:00 AM	3	2	5
5:00 AM - 6:00 AM	10	21	31
6:00 AM - 7:00 AM	71	20	91
7:00 AM - 8:00 AM	138	50	188
8:00 AM - 9:00 AM	90	62	152
9:00 AM - 10:00 AM	56	44	100
10:00 AM - 11:00 AM	63	72	135
11:00 AM - 12:00 PM	66	68	134
Total	**521**	**355**	**876**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	70	92	162
1:00 PM - 2:00 PM	80	73	153
2:00 PM - 3:00 PM	89	107	196
3:00 PM - 4:00 PM	117	139	256
4:00 PM - 5:00 PM	121	165	286
5:00 PM - 6:00 PM	84	166	250
6:00 PM - 7:00 PM	68	99	167
7:00 PM - 8:00 PM	47	52	99
8:00 PM - 9:00 PM	22	35	57
9:00 PM - 10:00 PM	20	24	44
10:00 PM - 11:00 PM	16	16	32
11:00 PM - 12:00 AM	14	14	28
Total	**748**	**982**	**1,730**

24-Hour	*EB*	*Volume*	*1,269*	*24-Hour*	*WB*	*Volume*	*1,337*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 22. Grove St, north of Lemon Grove Way

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

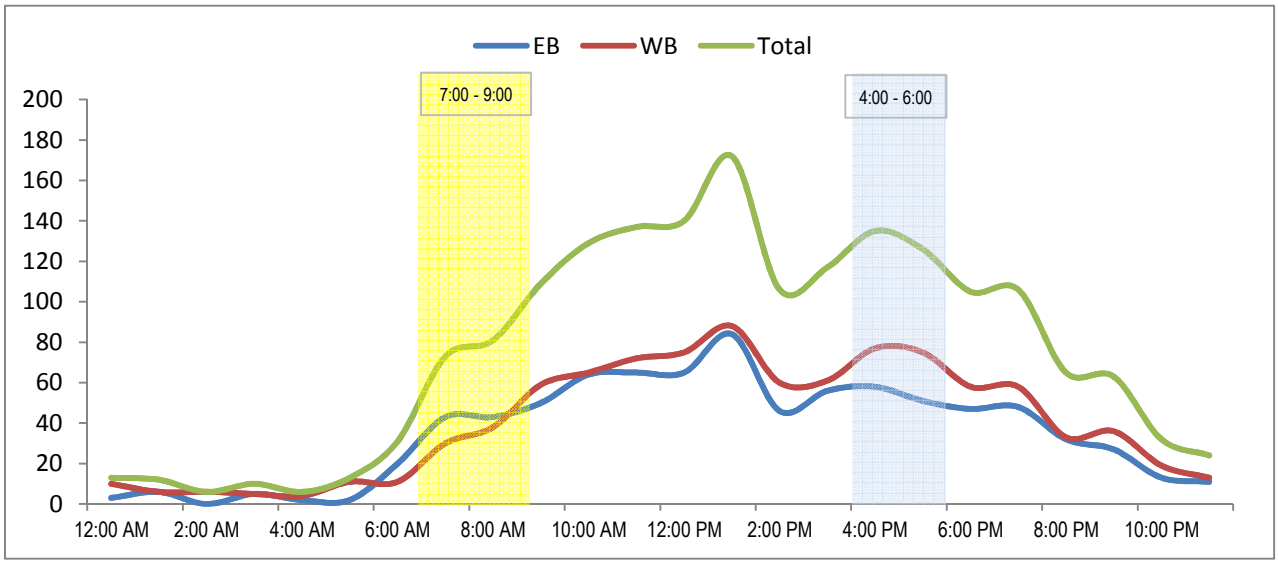
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,811*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	3	10	13
1:00 AM - 2:00 AM	6	6	12
2:00 AM - 3:00 AM	0	6	6
3:00 AM - 4:00 AM	5	5	10
4:00 AM - 5:00 AM	2	4	6
5:00 AM - 6:00 AM	2	11	13
6:00 AM - 7:00 AM	20	11	31
7:00 AM - 8:00 AM	43	30	73
8:00 AM - 9:00 AM	43	38	81
9:00 AM - 10:00 AM	50	59	109
10:00 AM - 11:00 AM	64	65	129
11:00 AM - 12:00 PM	65	72	137
Total	**303**	**317**	**620**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	65	75	140
1:00 PM - 2:00 PM	84	88	172
2:00 PM - 3:00 PM	46	60	106
3:00 PM - 4:00 PM	56	61	117
4:00 PM - 5:00 PM	58	77	135
5:00 PM - 6:00 PM	51	75	126
6:00 PM - 7:00 PM	47	58	105
7:00 PM - 8:00 PM	48	58	106
8:00 PM - 9:00 PM	32	33	65
9:00 PM - 10:00 PM	27	36	63
10:00 PM - 11:00 PM	13	19	32
11:00 PM - 12:00 AM	11	13	24
Total	**538**	**653**	**1,191**

24-Hour	*EB*	*Volume*	*841*	*24-Hour*	*WB*	*Volume*	*970*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 22. Grove St, north of Lemon Grove Way

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

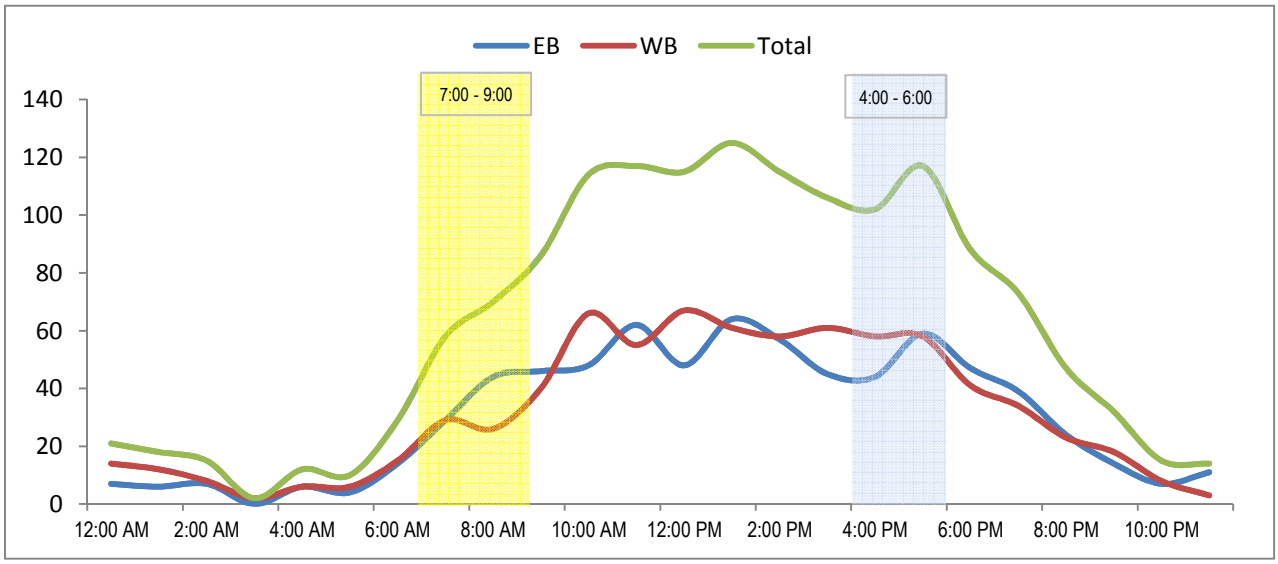
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,501*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	7	14	21
1:00 AM - 2:00 AM	6	12	18
2:00 AM - 3:00 AM	7	8	15
3:00 AM - 4:00 AM	0	2	2
4:00 AM - 5:00 AM	6	6	12
5:00 AM - 6:00 AM	4	6	10
6:00 AM - 7:00 AM	14	15	29
7:00 AM - 8:00 AM	29	29	58
8:00 AM - 9:00 AM	44	26	70
9:00 AM - 10:00 AM	46	40	86
10:00 AM - 11:00 AM	48	66	114
11:00 AM - 12:00 PM	62	55	117
Total	**273**	**279**	**552**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	48	67	115
1:00 PM - 2:00 PM	64	61	125
2:00 PM - 3:00 PM	57	58	115
3:00 PM - 4:00 PM	45	61	106
4:00 PM - 5:00 PM	44	58	102
5:00 PM - 6:00 PM	59	58	117
6:00 PM - 7:00 PM	47	41	88
7:00 PM - 8:00 PM	39	34	73
8:00 PM - 9:00 PM	24	23	47
9:00 PM - 10:00 PM	14	18	32
10:00 PM - 11:00 PM	7	8	15
11:00 PM - 12:00 AM	11	3	14
Total	**459**	**490**	**949**

24-Hour	*EB*	*Volume*	*732*	*24-Hour*	*WB*	*Volume*	*769*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

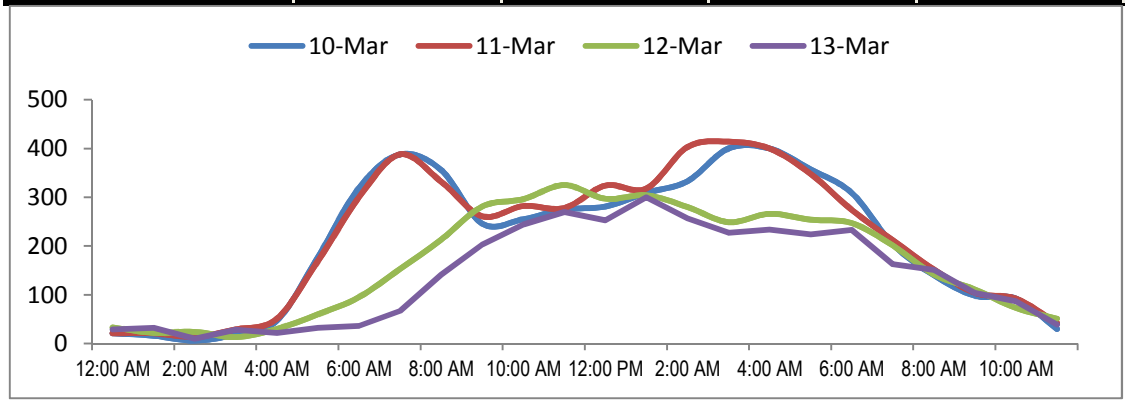
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 23. Grove St between North Ave and Lester Ave
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***4,428***
Highest Daily Traffic	***5,229***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	21	21	33	29
1:00 AM - 2:00 AM	16	21	22	32
2:00 AM - 3:00 AM	6	14	24	10
3:00 AM - 4:00 AM	19	29	13	28
4:00 AM - 5:00 AM	47	51	30	22
5:00 AM - 6:00 AM	177	169	60	32
6:00 AM - 7:00 AM	319	300	95	36
7:00 AM - 8:00 AM	388	388	153	67
8:00 AM - 9:00 AM	356	332	213	141
9:00 AM - 10:00 AM	246	261	281	203
10:00 AM - 11:00 AM	255	282	296	244
11:00 AM - 12:00 PM	275	278	325	270
12:00 PM - 1:00 PM	281	324	297	253
1:00 PM - 2:00 PM	309	318	304	300
2:00 PM - 3:00 PM	333	403	280	257
3:00 PM - 4:00 PM	400	414	249	227
4:00 PM - 5:00 PM	400	400	266	234
5:00 PM - 6:00 PM	357	348	254	224
6:00 PM - 7:00 PM	309	274	247	233
7:00 PM - 8:00 PM	204	212	201	163
8:00 PM - 9:00 PM	140	152	142	151
9:00 PM - 10:00 PM	98	104	111	104
10:00 PM - 11:00 PM	92	92	73	87
11:00 PM - 12:00 AM	30	42	51	39
Total	**5,078**	**5,229**	**4,020**	**3,386**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 23. Grove St between North Ave and Lester Ave

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

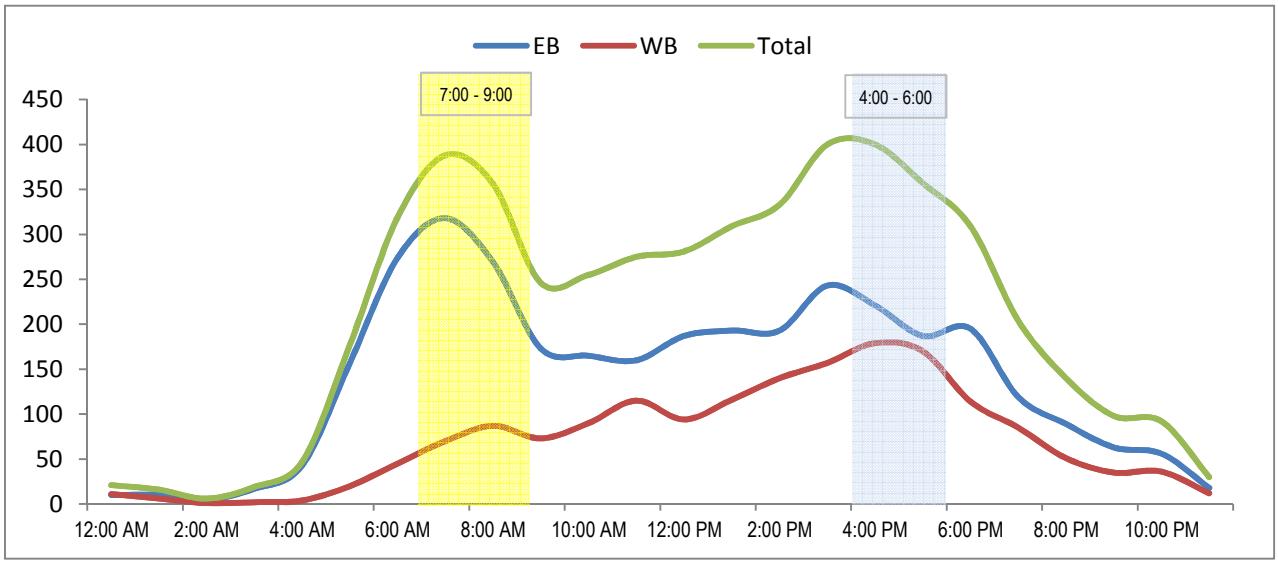
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,078***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	11	21
1:00 AM - 2:00 AM	10	6	16
2:00 AM - 3:00 AM	5	1	6
3:00 AM - 4:00 AM	17	2	19
4:00 AM - 5:00 AM	43	4	47
5:00 AM - 6:00 AM	157	20	177
6:00 AM - 7:00 AM	274	45	319
7:00 AM - 8:00 AM	318	70	388
8:00 AM - 9:00 AM	269	87	356
9:00 AM - 10:00 AM	173	73	246
10:00 AM - 11:00 AM	165	90	255
11:00 AM - 12:00 PM	160	115	275
Total	**1,601**	**524**	**2,125**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	187	94	281
1:00 PM - 2:00 PM	193	116	309
2:00 PM - 3:00 PM	193	140	333
3:00 PM - 4:00 PM	243	157	400
4:00 PM - 5:00 PM	221	179	400
5:00 PM - 6:00 PM	187	170	357
6:00 PM - 7:00 PM	195	114	309
7:00 PM - 8:00 PM	119	85	204
8:00 PM - 9:00 PM	89	51	140
9:00 PM - 10:00 PM	63	35	98
10:00 PM - 11:00 PM	56	36	92
11:00 PM - 12:00 AM	18	12	30
Total	**1,764**	**1,189**	**2,953**

24-Hour	***EB***	***Volume***	***3,365***	***24-Hour***	***WB***	***Volume***	***1,713***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 23. Grove St between North Ave and Lester Ave

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

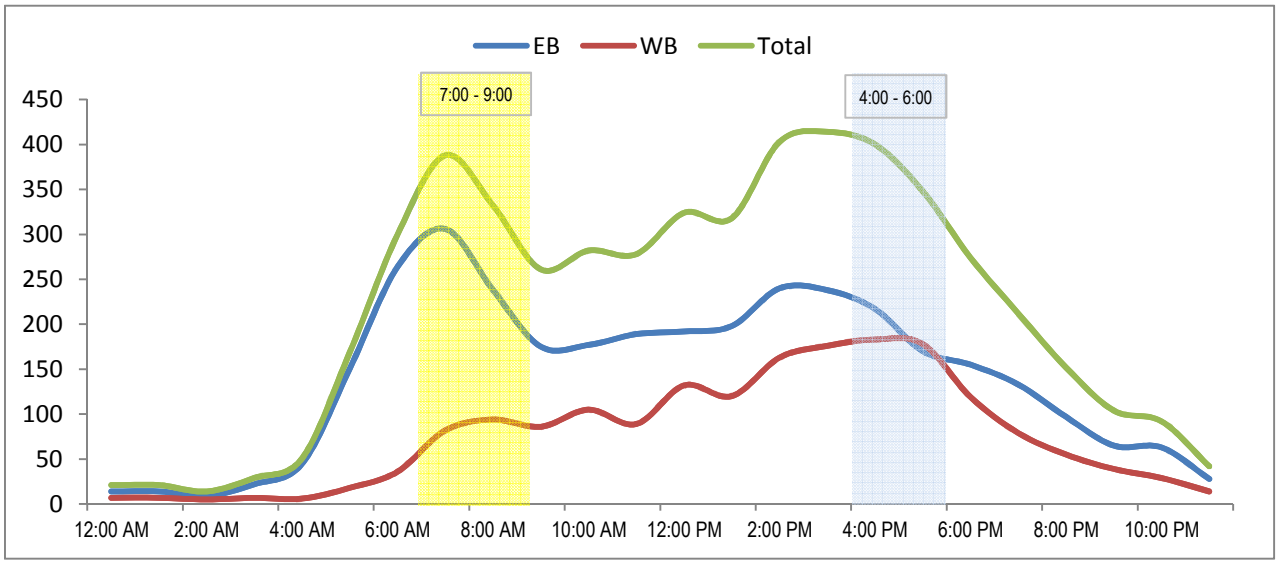
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,229*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	14	7	21
1:00 AM - 2:00 AM	14	7	21
2:00 AM - 3:00 AM	9	5	14
3:00 AM - 4:00 AM	22	7	29
4:00 AM - 5:00 AM	45	6	51
5:00 AM - 6:00 AM	151	18	169
6:00 AM - 7:00 AM	264	36	300
7:00 AM - 8:00 AM	306	82	388
8:00 AM - 9:00 AM	238	94	332
9:00 AM - 10:00 AM	175	86	261
10:00 AM - 11:00 AM	177	105	282
11:00 AM - 12:00 PM	189	89	278
Total	**1,604**	**542**	**2,146**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	192	132	324
1:00 PM - 2:00 PM	198	120	318
2:00 PM - 3:00 PM	240	163	403
3:00 PM - 4:00 PM	238	176	414
4:00 PM - 5:00 PM	217	183	400
5:00 PM - 6:00 PM	170	178	348
6:00 PM - 7:00 PM	155	119	274
7:00 PM - 8:00 PM	133	79	212
8:00 PM - 9:00 PM	97	55	152
9:00 PM - 10:00 PM	65	39	104
10:00 PM - 11:00 PM	63	29	92
11:00 PM - 12:00 AM	28	14	42
Total	**1,796**	**1,287**	**3,083**

24-Hour	*EB*	*Volume*	*3,400*	*24-Hour*	*WB*	*Volume*	*1,829*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 23. Grove St between North Ave and Lester Ave

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

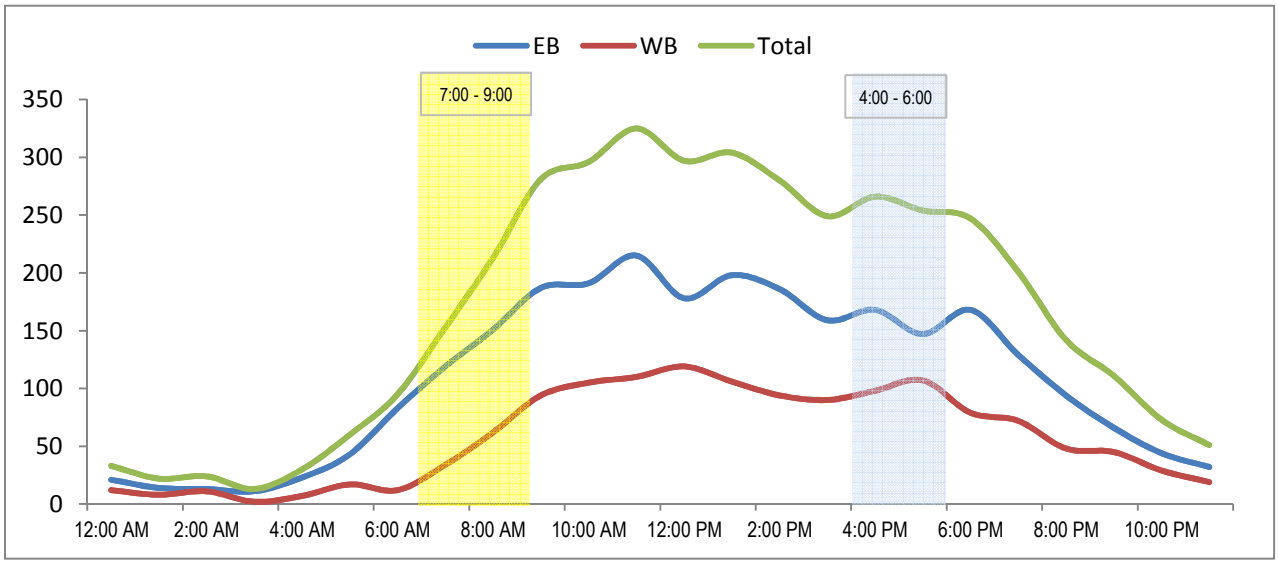
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,020*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	21	12	33
1:00 AM - 2:00 AM	14	8	22
2:00 AM - 3:00 AM	13	11	24
3:00 AM - 4:00 AM	11	2	13
4:00 AM - 5:00 AM	23	7	30
5:00 AM - 6:00 AM	43	17	60
6:00 AM - 7:00 AM	83	12	95
7:00 AM - 8:00 AM	119	34	153
8:00 AM - 9:00 AM	151	62	213
9:00 AM - 10:00 AM	187	94	281
10:00 AM - 11:00 AM	191	105	296
11:00 AM - 12:00 PM	215	110	325
Total	**1,071**	**474**	**1,545**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	178	119	297
1:00 PM - 2:00 PM	198	106	304
2:00 PM - 3:00 PM	186	94	280
3:00 PM - 4:00 PM	159	90	249
4:00 PM - 5:00 PM	168	98	266
5:00 PM - 6:00 PM	147	107	254
6:00 PM - 7:00 PM	168	79	247
7:00 PM - 8:00 PM	129	72	201
8:00 PM - 9:00 PM	94	48	142
9:00 PM - 10:00 PM	66	45	111
10:00 PM - 11:00 PM	44	29	73
11:00 PM - 12:00 AM	32	19	51
Total	**1,569**	**906**	**2,475**

24-Hour	*EB*	*Volume*	*2,640*	*24-Hour*	*WB*	*Volume*	*1,380*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 23. Grove St between North Ave and Lester Ave

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

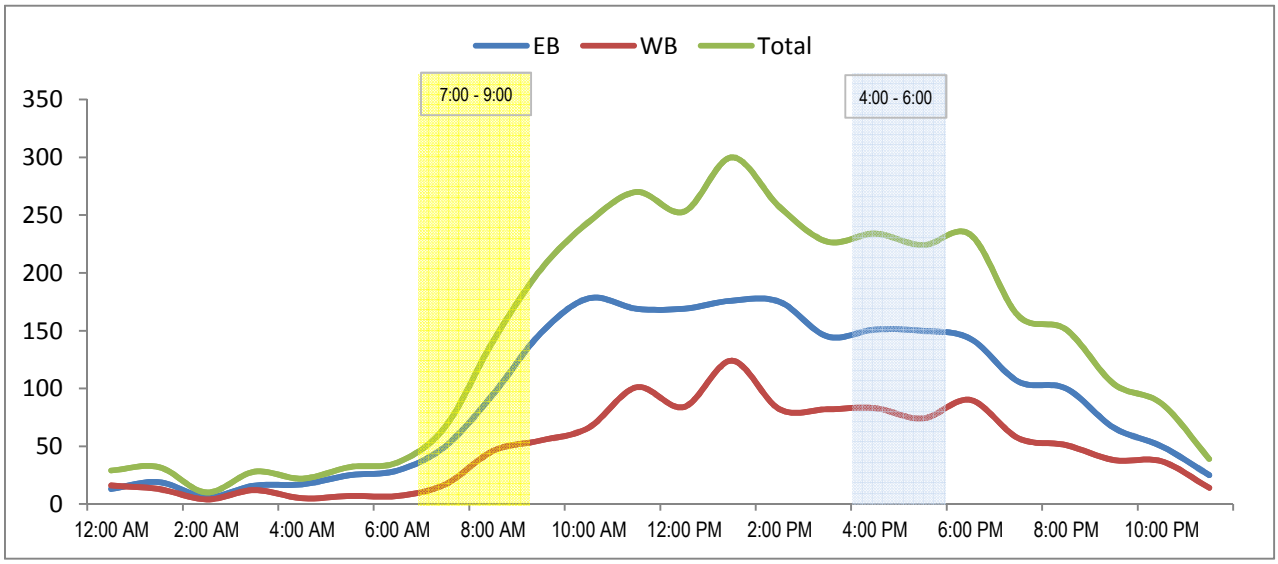
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*3,386*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	13	16	29
1:00 AM - 2:00 AM	19	13	32
2:00 AM - 3:00 AM	6	4	10
3:00 AM - 4:00 AM	16	12	28
4:00 AM - 5:00 AM	17	5	22
5:00 AM - 6:00 AM	25	7	32
6:00 AM - 7:00 AM	29	7	36
7:00 AM - 8:00 AM	50	17	67
8:00 AM - 9:00 AM	95	46	141
9:00 AM - 10:00 AM	148	55	203
10:00 AM - 11:00 AM	178	66	244
11:00 AM - 12:00 PM	169	101	270
Total	**765**	**349**	**1,114**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	169	84	253
1:00 PM - 2:00 PM	176	124	300
2:00 PM - 3:00 PM	175	82	257
3:00 PM - 4:00 PM	145	82	227
4:00 PM - 5:00 PM	151	83	234
5:00 PM - 6:00 PM	150	74	224
6:00 PM - 7:00 PM	143	90	233
7:00 PM - 8:00 PM	106	57	163
8:00 PM - 9:00 PM	100	51	151
9:00 PM - 10:00 PM	66	38	104
10:00 PM - 11:00 PM	50	37	87
11:00 PM - 12:00 AM	25	14	39
Total	**1,456**	**816**	**2,272**

24-Hour	*EB*	*Volume*	*2,221*	*24-Hour*	*WB*	*Volume*	*1,165*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

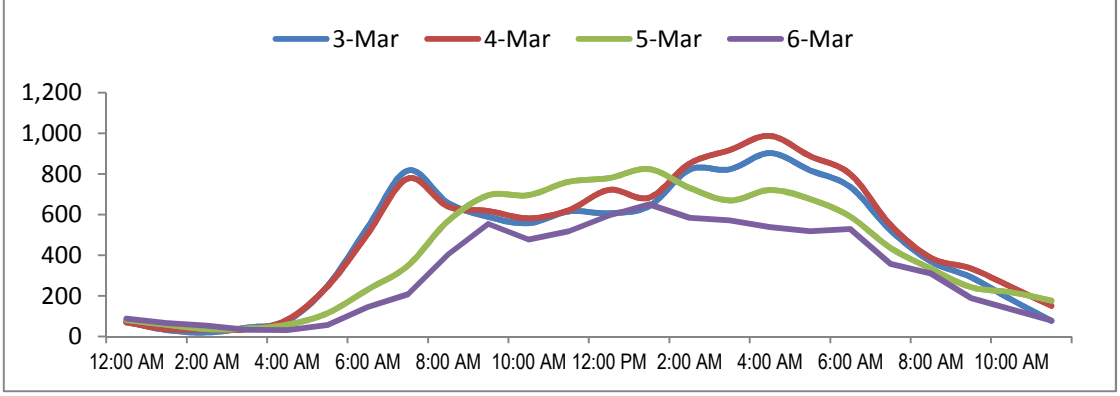
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 24. Kempf St between Broadway and Golden Ave
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***10,157***
Highest Daily Traffic	***11,771***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	72	70	82	88
1:00 AM - 2:00 AM	32	37	58	67
2:00 AM - 3:00 AM	20	35	37	54
3:00 AM - 4:00 AM	44	36	39	33
4:00 AM - 5:00 AM	77	83	58	32
5:00 AM - 6:00 AM	249	247	115	57
6:00 AM - 7:00 AM	538	505	231	145
7:00 AM - 8:00 AM	817	778	349	208
8:00 AM - 9:00 AM	657	640	569	405
9:00 AM - 10:00 AM	589	618	695	555
10:00 AM - 11:00 AM	558	582	696	478
11:00 AM - 12:00 PM	616	622	762	519
12:00 PM - 1:00 PM	607	722	780	595
1:00 PM - 2:00 PM	642	684	824	651
2:00 PM - 3:00 PM	821	851	732	584
3:00 PM - 4:00 PM	823	918	670	572
4:00 PM - 5:00 PM	903	988	721	539
5:00 PM - 6:00 PM	818	888	677	519
6:00 PM - 7:00 PM	736	799	590	530
7:00 PM - 8:00 PM	522	550	436	358
8:00 PM - 9:00 PM	370	388	334	311
9:00 PM - 10:00 PM	292	335	243	189
10:00 PM - 11:00 PM	182	244	218	134
11:00 PM - 12:00 AM	77	151	177	79
Total	**11,062**	**11,771**	**10,093**	**7,702**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 24. Kempf St between Broadway and Golden Ave

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

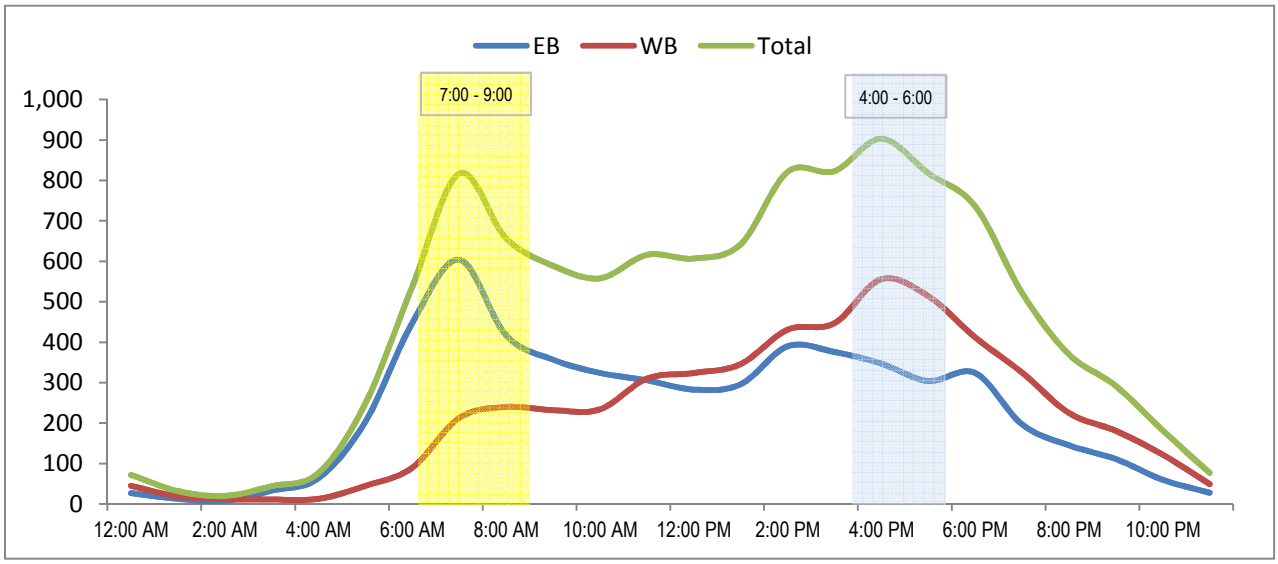
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***11,062***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	27	45	72
1:00 AM - 2:00 AM	13	19	32
2:00 AM - 3:00 AM	8	12	20
3:00 AM - 4:00 AM	33	11	44
4:00 AM - 5:00 AM	64	13	77
5:00 AM - 6:00 AM	204	45	249
6:00 AM - 7:00 AM	448	90	538
7:00 AM - 8:00 AM	604	213	817
8:00 AM - 9:00 AM	417	240	657
9:00 AM - 10:00 AM	357	232	589
10:00 AM - 11:00 AM	324	234	558
11:00 AM - 12:00 PM	306	310	616
Total	**2,805**	**1,464**	**4,269**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	283	324	607
1:00 PM - 2:00 PM	296	346	642
2:00 PM - 3:00 PM	390	431	821
3:00 PM - 4:00 PM	376	447	823
4:00 PM - 5:00 PM	347	556	903
5:00 PM - 6:00 PM	304	514	818
6:00 PM - 7:00 PM	324	412	736
7:00 PM - 8:00 PM	197	325	522
8:00 PM - 9:00 PM	145	225	370
9:00 PM - 10:00 PM	111	181	292
10:00 PM - 11:00 PM	60	122	182
11:00 PM - 12:00 AM	28	49	77
Total	**2,861**	**3,932**	**6,793**

24-Hour EB Volume	***5,666***	***24-Hour WB Volume***	***5,396***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 24. Kempf St between Broadway and Golden Ave

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

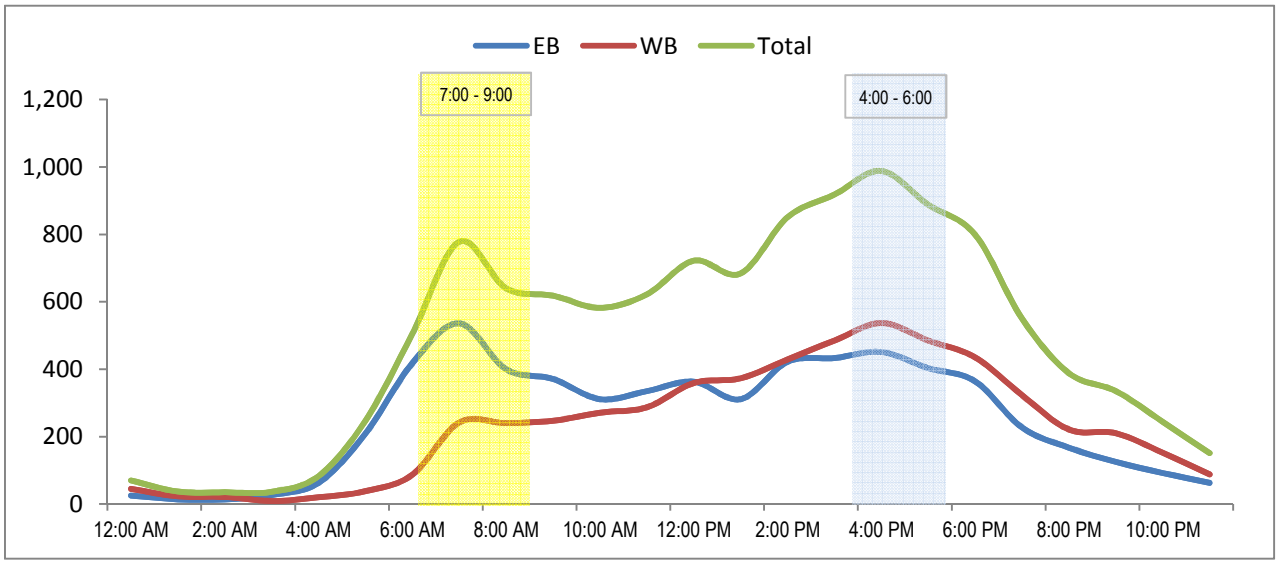
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***11,771***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	25	45	70
1:00 AM - 2:00 AM	14	23	37
2:00 AM - 3:00 AM	14	21	35
3:00 AM - 4:00 AM	27	9	36
4:00 AM - 5:00 AM	63	20	83
5:00 AM - 6:00 AM	209	38	247
6:00 AM - 7:00 AM	418	87	505
7:00 AM - 8:00 AM	536	242	778
8:00 AM - 9:00 AM	400	240	640
9:00 AM - 10:00 AM	371	247	618
10:00 AM - 11:00 AM	311	271	582
11:00 AM - 12:00 PM	335	287	622
Total	**2,723**	**1,530**	**4,253**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	363	359	722
1:00 PM - 2:00 PM	311	373	684
2:00 PM - 3:00 PM	422	429	851
3:00 PM - 4:00 PM	433	485	918
4:00 PM - 5:00 PM	451	537	988
5:00 PM - 6:00 PM	403	485	888
6:00 PM - 7:00 PM	364	435	799
7:00 PM - 8:00 PM	227	323	550
8:00 PM - 9:00 PM	167	221	388
9:00 PM - 10:00 PM	125	210	335
10:00 PM - 11:00 PM	92	152	244
11:00 PM - 12:00 AM	63	88	151
Total	**3,421**	**4,097**	**7,518**

24-Hour EB Volume	***6,144***	***24-Hour WB Volume***	***5,627***



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 24. Kempf St between Broadway and Golden Ave

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

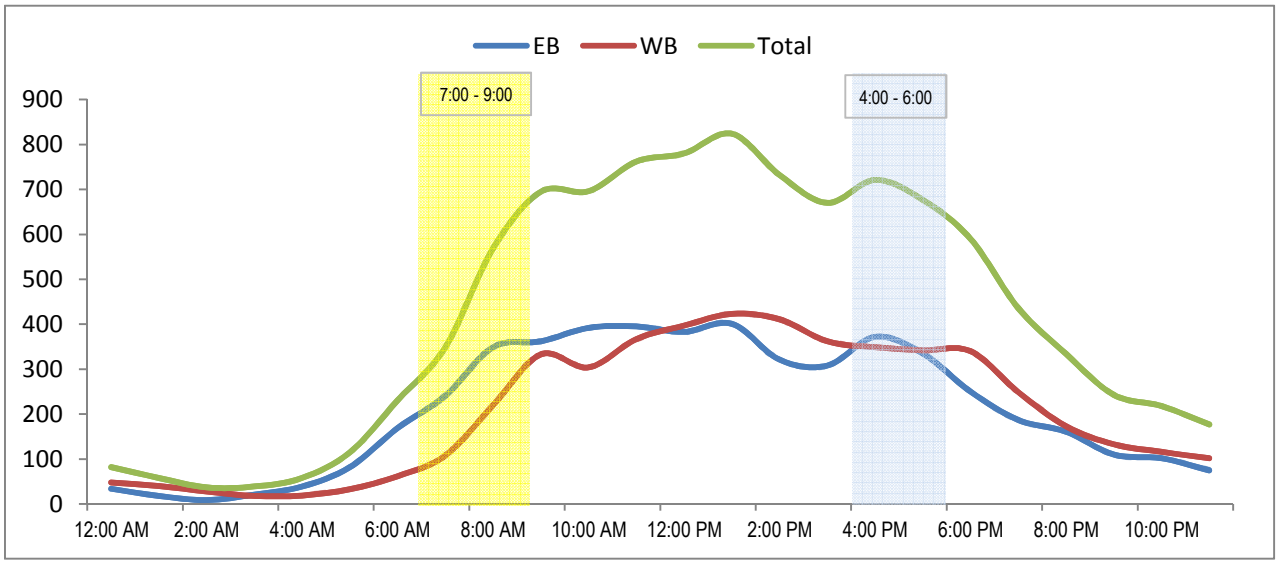
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***10,093***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	34	48	82
1:00 AM - 2:00 AM	18	40	58
2:00 AM - 3:00 AM	9	28	37
3:00 AM - 4:00 AM	21	18	39
4:00 AM - 5:00 AM	39	19	58
5:00 AM - 6:00 AM	82	33	115
6:00 AM - 7:00 AM	169	62	231
7:00 AM - 8:00 AM	241	108	349
8:00 AM - 9:00 AM	349	220	569
9:00 AM - 10:00 AM	362	333	695
10:00 AM - 11:00 AM	392	304	696
11:00 AM - 12:00 PM	395	367	762
Total	**2,111**	**1,580**	**3,691**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	383	397	780
1:00 PM - 2:00 PM	401	423	824
2:00 PM - 3:00 PM	321	411	732
3:00 PM - 4:00 PM	308	362	670
4:00 PM - 5:00 PM	372	349	721
5:00 PM - 6:00 PM	335	342	677
6:00 PM - 7:00 PM	250	340	590
7:00 PM - 8:00 PM	187	249	436
8:00 PM - 9:00 PM	161	173	334
9:00 PM - 10:00 PM	110	133	243
10:00 PM - 11:00 PM	102	116	218
11:00 PM - 12:00 AM	75	102	177
Total	**3,005**	**3,397**	**6,402**

24-Hour	***EB***	***Volume***	***5,116***	***24-Hour***	***WB***	***Volume***	***4,977***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 24. Kempf St between Broadway and Golden Ave

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

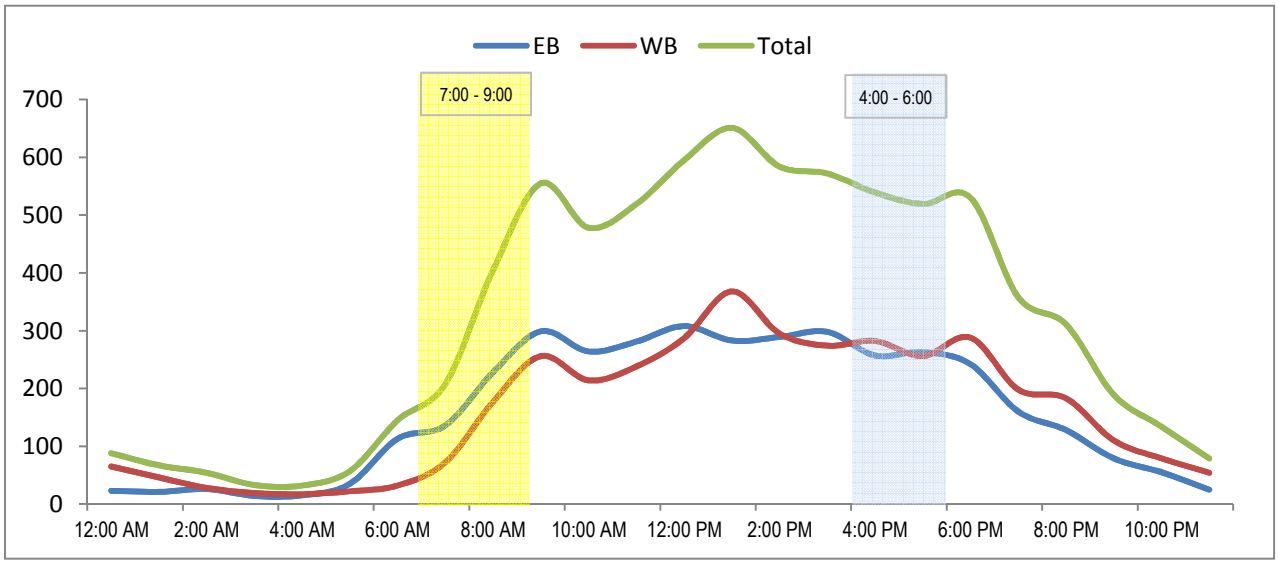
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*7,702*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	23	65	88
1:00 AM - 2:00 AM	21	46	67
2:00 AM - 3:00 AM	26	28	54
3:00 AM - 4:00 AM	14	19	33
4:00 AM - 5:00 AM	15	17	32
5:00 AM - 6:00 AM	35	22	57
6:00 AM - 7:00 AM	113	32	145
7:00 AM - 8:00 AM	136	72	208
8:00 AM - 9:00 AM	228	177	405
9:00 AM - 10:00 AM	299	256	555
10:00 AM - 11:00 AM	264	214	478
11:00 AM - 12:00 PM	281	238	519
Total	**1,455**	**1,186**	**2,641**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	308	287	595
1:00 PM - 2:00 PM	283	368	651
2:00 PM - 3:00 PM	289	295	584
3:00 PM - 4:00 PM	298	274	572
4:00 PM - 5:00 PM	257	282	539
5:00 PM - 6:00 PM	263	256	519
6:00 PM - 7:00 PM	242	288	530
7:00 PM - 8:00 PM	160	198	358
8:00 PM - 9:00 PM	128	183	311
9:00 PM - 10:00 PM	79	110	189
10:00 PM - 11:00 PM	55	79	134
11:00 PM - 12:00 AM	25	54	79
Total	**2,387**	**2,674**	**5,061**

24-Hour	*EB*	*Volume*	*3,842*	*24-Hour*	*WB*	*Volume*	*3,860*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

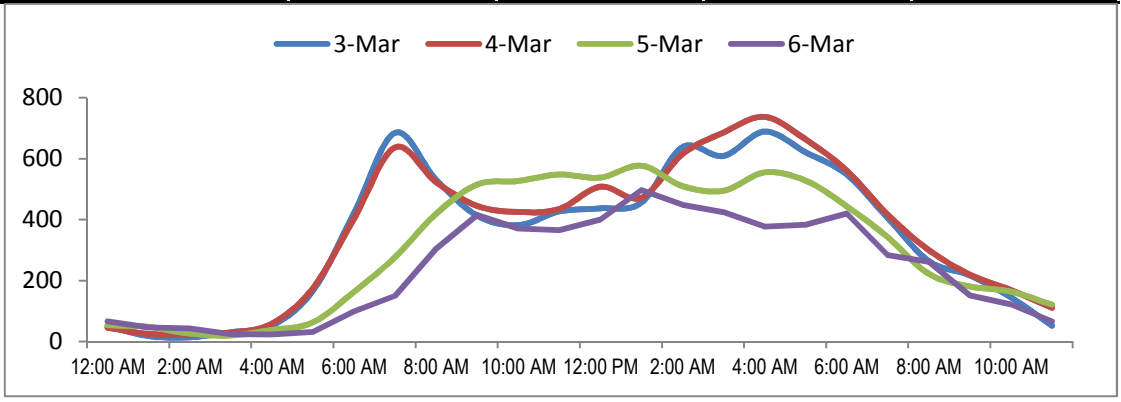
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 25. Kempf St between Roy St and Adams St
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***7,526***
Highest Daily Traffic	***8,682***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	50	45	54	66
1:00 AM - 2:00 AM	18	25	48	46
2:00 AM - 3:00 AM	14	23	26	43
3:00 AM - 4:00 AM	31	29	20	24
4:00 AM - 5:00 AM	52	59	38	23
5:00 AM - 6:00 AM	167	175	63	32
6:00 AM - 7:00 AM	421	403	163	99
7:00 AM - 8:00 AM	685	637	277	150
8:00 AM - 9:00 AM	531	523	419	305
9:00 AM - 10:00 AM	413	445	515	415
10:00 AM - 11:00 AM	382	425	527	371
11:00 AM - 12:00 PM	427	435	548	366
12:00 PM - 1:00 PM	437	508	538	400
1:00 PM - 2:00 PM	456	472	577	497
2:00 PM - 3:00 PM	638	615	510	448
3:00 PM - 4:00 PM	609	686	495	424
4:00 PM - 5:00 PM	689	737	555	377
5:00 PM - 6:00 PM	621	663	528	383
6:00 PM - 7:00 PM	548	561	444	420
7:00 PM - 8:00 PM	405	416	342	284
8:00 PM - 9:00 PM	264	300	222	262
9:00 PM - 10:00 PM	217	220	181	151
10:00 PM - 11:00 PM	145	169	164	122
11:00 PM - 12:00 AM	52	111	121	66
Total	**8,272**	**8,682**	**7,375**	**5,774**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 25. Kempf St between Roy St and Adams St

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

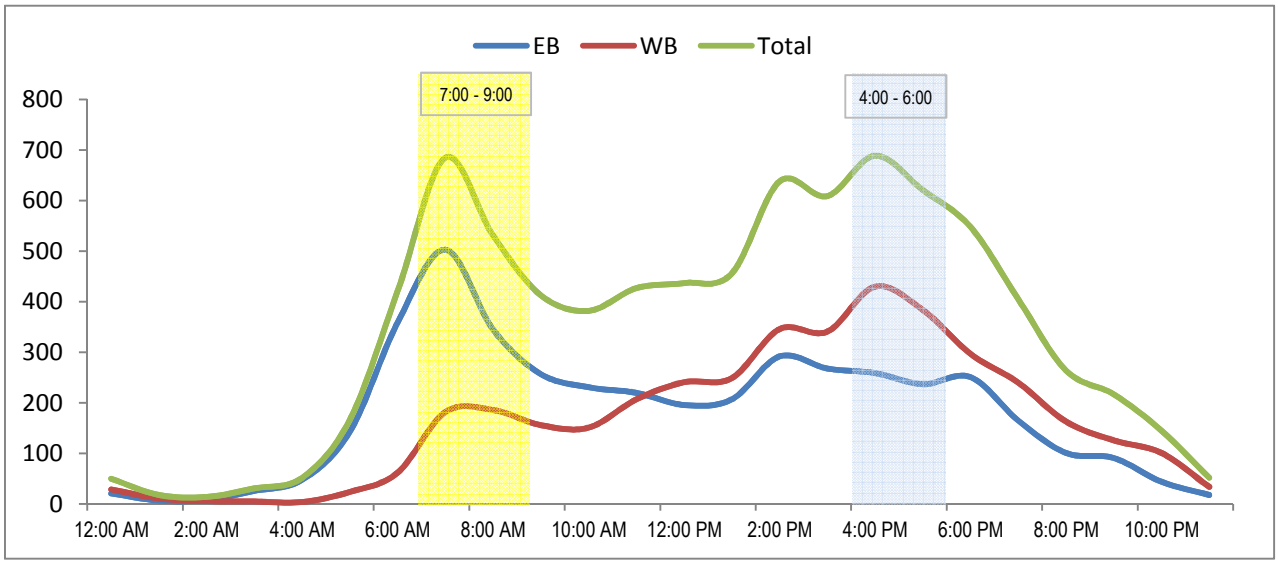
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*8,272*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	21	29	50
1:00 AM - 2:00 AM	7	11	18
2:00 AM - 3:00 AM	8	6	14
3:00 AM - 4:00 AM	26	5	31
4:00 AM - 5:00 AM	48	4	52
5:00 AM - 6:00 AM	143	24	167
6:00 AM - 7:00 AM	359	62	421
7:00 AM - 8:00 AM	503	182	685
8:00 AM - 9:00 AM	345	186	531
9:00 AM - 10:00 AM	257	156	413
10:00 AM - 11:00 AM	231	151	382
11:00 AM - 12:00 PM	220	207	427
Total	**2,168**	**1,023**	**3,191**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	196	241	437
1:00 PM - 2:00 PM	207	249	456
2:00 PM - 3:00 PM	292	346	638
3:00 PM - 4:00 PM	268	341	609
4:00 PM - 5:00 PM	259	430	689
5:00 PM - 6:00 PM	237	384	621
6:00 PM - 7:00 PM	251	297	548
7:00 PM - 8:00 PM	165	240	405
8:00 PM - 9:00 PM	101	163	264
9:00 PM - 10:00 PM	91	126	217
10:00 PM - 11:00 PM	44	101	145
11:00 PM - 12:00 AM	18	34	52
Total	**2,129**	**2,952**	**5,081**

24-Hour	*EB*	*Volume*	*4,297*	*24-Hour*	*WB*	*Volume*	*3,975*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 25. Kempf St between Roy St and Adams St

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

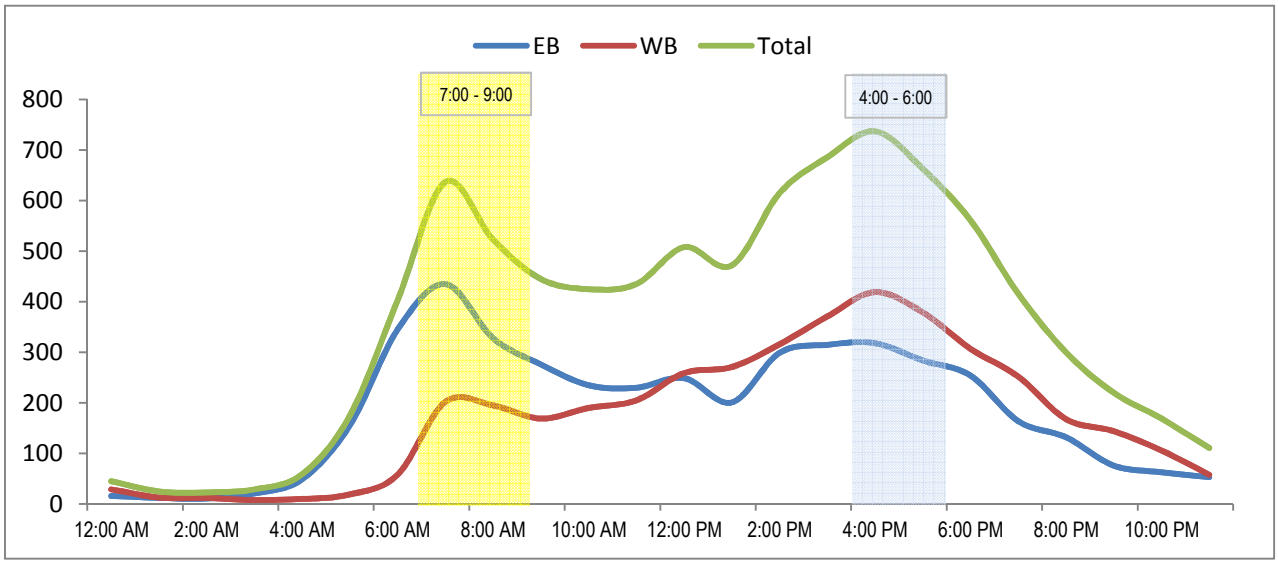
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*8,682*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	16	29	45
1:00 AM - 2:00 AM	12	13	25
2:00 AM - 3:00 AM	11	12	23
3:00 AM - 4:00 AM	21	8	29
4:00 AM - 5:00 AM	49	10	59
5:00 AM - 6:00 AM	156	19	175
6:00 AM - 7:00 AM	345	58	403
7:00 AM - 8:00 AM	435	202	637
8:00 AM - 9:00 AM	328	195	523
9:00 AM - 10:00 AM	276	169	445
10:00 AM - 11:00 AM	235	190	425
11:00 AM - 12:00 PM	230	205	435
Total	**2,114**	**1,110**	**3,224**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	249	259	508
1:00 PM - 2:00 PM	201	271	472
2:00 PM - 3:00 PM	299	316	615
3:00 PM - 4:00 PM	315	371	686
4:00 PM - 5:00 PM	318	419	737
5:00 PM - 6:00 PM	284	379	663
6:00 PM - 7:00 PM	254	307	561
7:00 PM - 8:00 PM	164	252	416
8:00 PM - 9:00 PM	132	168	300
9:00 PM - 10:00 PM	76	144	220
10:00 PM - 11:00 PM	63	106	169
11:00 PM - 12:00 AM	53	58	111
Total	**2,408**	**3,050**	**5,458**

24-Hour	*EB*	*Volume*	*4,522*	*24-Hour*	*WB*	*Volume*	*4,160*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 25. Kempf St between Roy St and Adams St

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

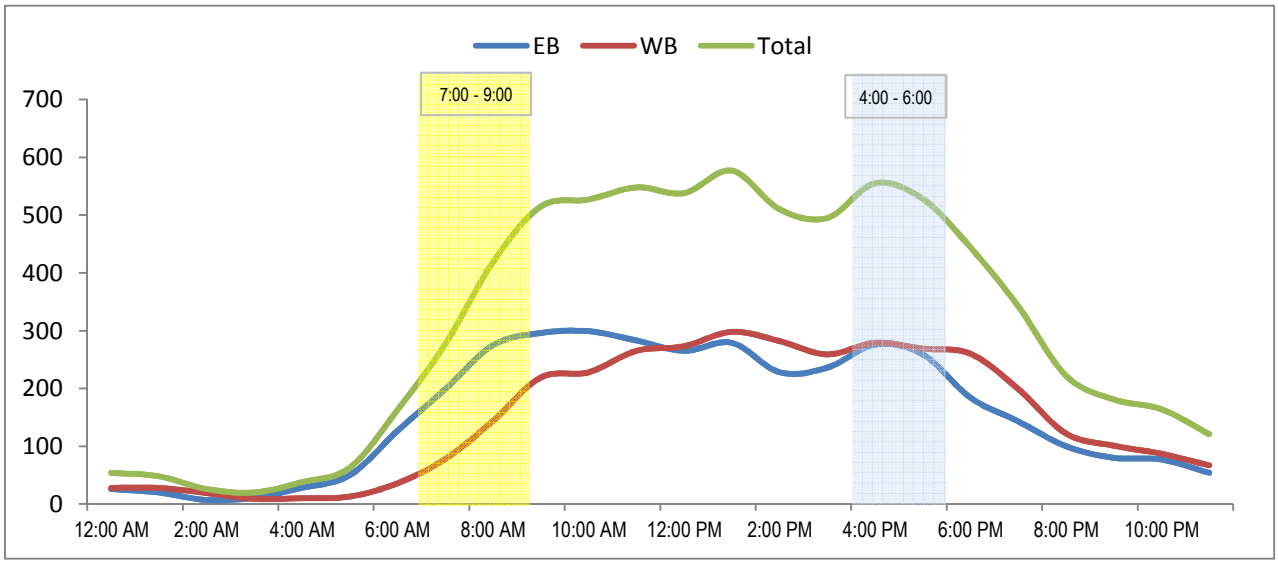
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*7,375*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	26	28	54
1:00 AM - 2:00 AM	20	28	48
2:00 AM - 3:00 AM	7	19	26
3:00 AM - 4:00 AM	11	9	20
4:00 AM - 5:00 AM	28	10	38
5:00 AM - 6:00 AM	50	13	63
6:00 AM - 7:00 AM	127	36	163
7:00 AM - 8:00 AM	199	78	277
8:00 AM - 9:00 AM	275	144	419
9:00 AM - 10:00 AM	296	219	515
10:00 AM - 11:00 AM	299	228	527
11:00 AM - 12:00 PM	283	265	548
Total	**1,621**	**1,077**	**2,698**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	265	273	538
1:00 PM - 2:00 PM	279	298	577
2:00 PM - 3:00 PM	228	282	510
3:00 PM - 4:00 PM	236	259	495
4:00 PM - 5:00 PM	276	279	555
5:00 PM - 6:00 PM	259	269	528
6:00 PM - 7:00 PM	184	260	444
7:00 PM - 8:00 PM	143	199	342
8:00 PM - 9:00 PM	100	122	222
9:00 PM - 10:00 PM	80	101	181
10:00 PM - 11:00 PM	77	87	164
11:00 PM - 12:00 AM	54	67	121
Total	**2,181**	**2,496**	**4,677**

24-Hour	*EB*	*Volume*	*3,802*	*24-Hour*	*WB*	*Volume*	*3,573*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 25. Kempf St between Roy St and Adams St

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

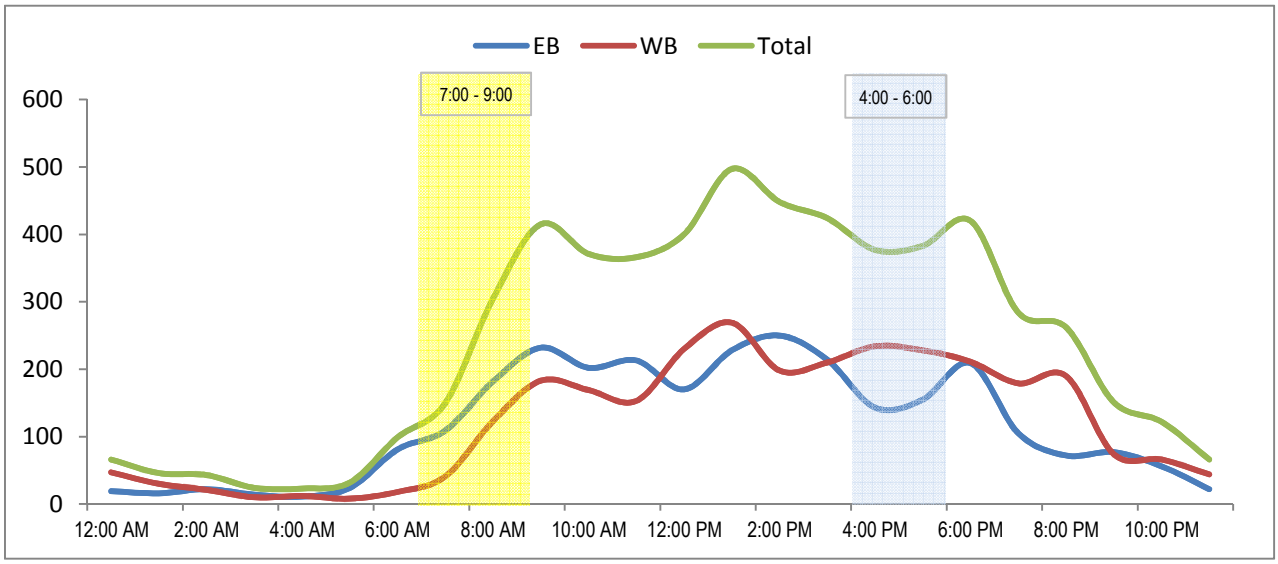
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,774*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	19	47	66
1:00 AM - 2:00 AM	16	30	46
2:00 AM - 3:00 AM	22	21	43
3:00 AM - 4:00 AM	14	10	24
4:00 AM - 5:00 AM	11	12	23
5:00 AM - 6:00 AM	24	8	32
6:00 AM - 7:00 AM	81	18	99
7:00 AM - 8:00 AM	109	41	150
8:00 AM - 9:00 AM	182	123	305
9:00 AM - 10:00 AM	232	183	415
10:00 AM - 11:00 AM	202	169	371
11:00 AM - 12:00 PM	213	153	366
Total	**1,125**	**815**	**1,940**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	170	230	400
1:00 PM - 2:00 PM	228	269	497
2:00 PM - 3:00 PM	250	198	448
3:00 PM - 4:00 PM	214	210	424
4:00 PM - 5:00 PM	143	234	377
5:00 PM - 6:00 PM	155	228	383
6:00 PM - 7:00 PM	209	211	420
7:00 PM - 8:00 PM	105	179	284
8:00 PM - 9:00 PM	72	190	262
9:00 PM - 10:00 PM	77	74	151
10:00 PM - 11:00 PM	56	66	122
11:00 PM - 12:00 AM	22	44	66
Total	**1,701**	**2,133**	**3,834**

24-Hour	*EB*	*Volume*	*2,826*	*24-Hour*	*WB*	*Volume*	*2,948*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

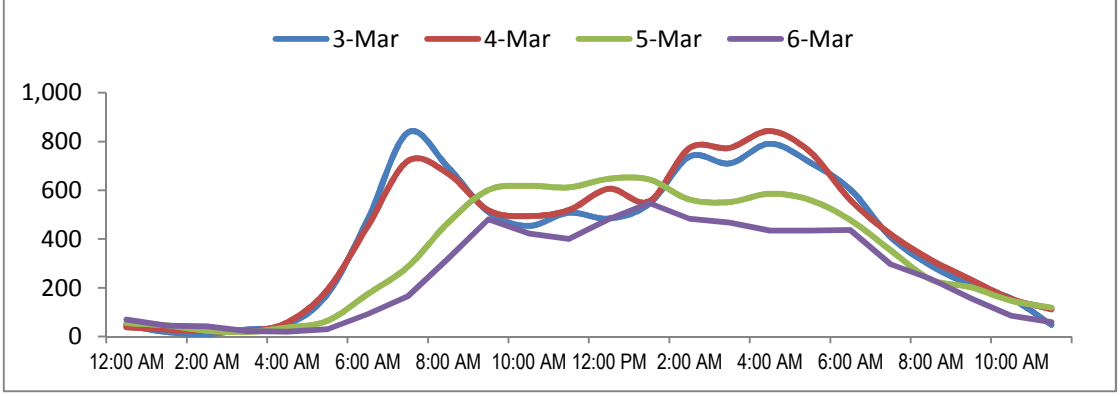
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 26. Skyline Dr, sourth of Lincoln St
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***8,417***
Highest Daily Traffic	***9,837***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	47	38	55	70
1:00 AM - 2:00 AM	18	29	46	45
2:00 AM - 3:00 AM	11	22	24	42
3:00 AM - 4:00 AM	29	22	19	22
4:00 AM - 5:00 AM	48	58	37	20
5:00 AM - 6:00 AM	175	192	65	31
6:00 AM - 7:00 AM	480	453	174	92
7:00 AM - 8:00 AM	837	720	287	165
8:00 AM - 9:00 AM	694	668	467	321
9:00 AM - 10:00 AM	511	518	601	480
10:00 AM - 11:00 AM	454	494	618	423
11:00 AM - 12:00 PM	508	519	612	400
12:00 PM - 1:00 PM	484	606	647	482
1:00 PM - 2:00 PM	544	555	644	547
2:00 PM - 3:00 PM	738	773	562	483
3:00 PM - 4:00 PM	710	774	552	467
4:00 PM - 5:00 PM	791	843	586	434
5:00 PM - 6:00 PM	714	757	560	434
6:00 PM - 7:00 PM	603	560	478	437
7:00 PM - 8:00 PM	408	420	354	297
8:00 PM - 9:00 PM	291	315	234	236
9:00 PM - 10:00 PM	211	234	202	156
10:00 PM - 11:00 PM	156	155	147	86
11:00 PM - 12:00 AM	48	112	119	59
Total	**9,510**	**9,837**	**8,090**	**6,229**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 26. Skyline Dr, sourth of Lincoln St

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

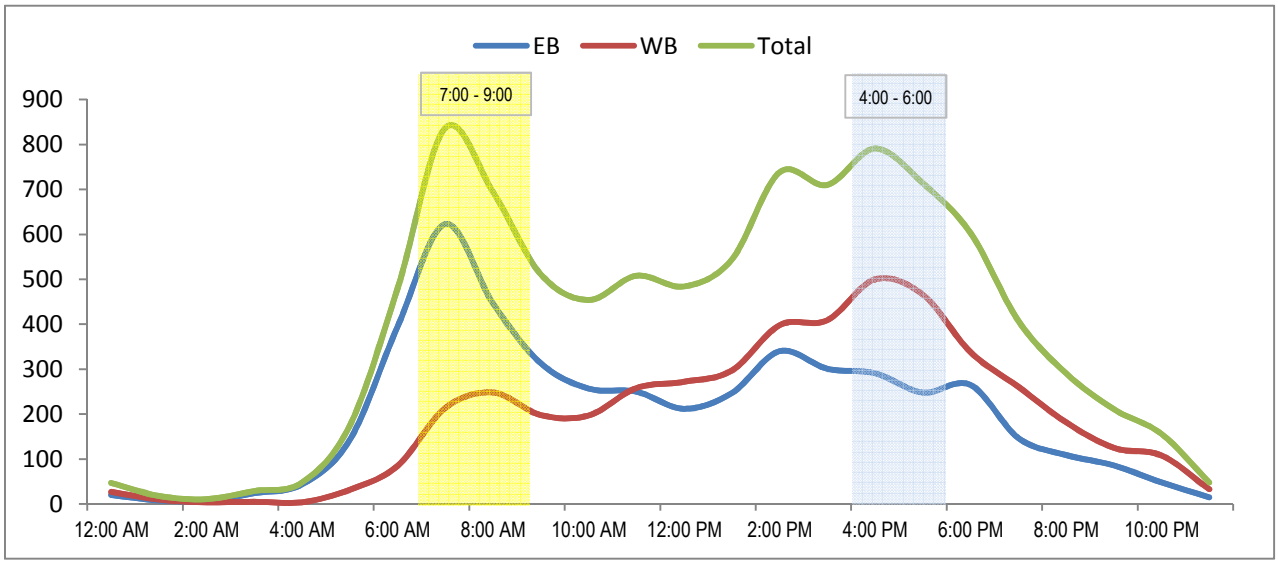
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*9,510*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	20	27	47
1:00 AM - 2:00 AM	8	10	18
2:00 AM - 3:00 AM	7	4	11
3:00 AM - 4:00 AM	24	5	29
4:00 AM - 5:00 AM	44	4	48
5:00 AM - 6:00 AM	143	32	175
6:00 AM - 7:00 AM	395	85	480
7:00 AM - 8:00 AM	623	214	837
8:00 AM - 9:00 AM	446	248	694
9:00 AM - 10:00 AM	313	198	511
10:00 AM - 11:00 AM	257	197	454
11:00 AM - 12:00 PM	250	258	508
Total	**2,530**	**1,282**	**3,812**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	212	272	484
1:00 PM - 2:00 PM	247	297	544
2:00 PM - 3:00 PM	340	398	738
3:00 PM - 4:00 PM	301	409	710
4:00 PM - 5:00 PM	291	500	791
5:00 PM - 6:00 PM	248	466	714
6:00 PM - 7:00 PM	265	338	603
7:00 PM - 8:00 PM	147	261	408
8:00 PM - 9:00 PM	109	182	291
9:00 PM - 10:00 PM	86	125	211
10:00 PM - 11:00 PM	48	108	156
11:00 PM - 12:00 AM	15	33	48
Total	**2,309**	**3,389**	**5,698**

24-Hour	*EB*	*Volume*	*4,839*	*24-Hour*	*WB*	*Volume*	*4,671*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 26. Skyline Dr, sourth of Lincoln St

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

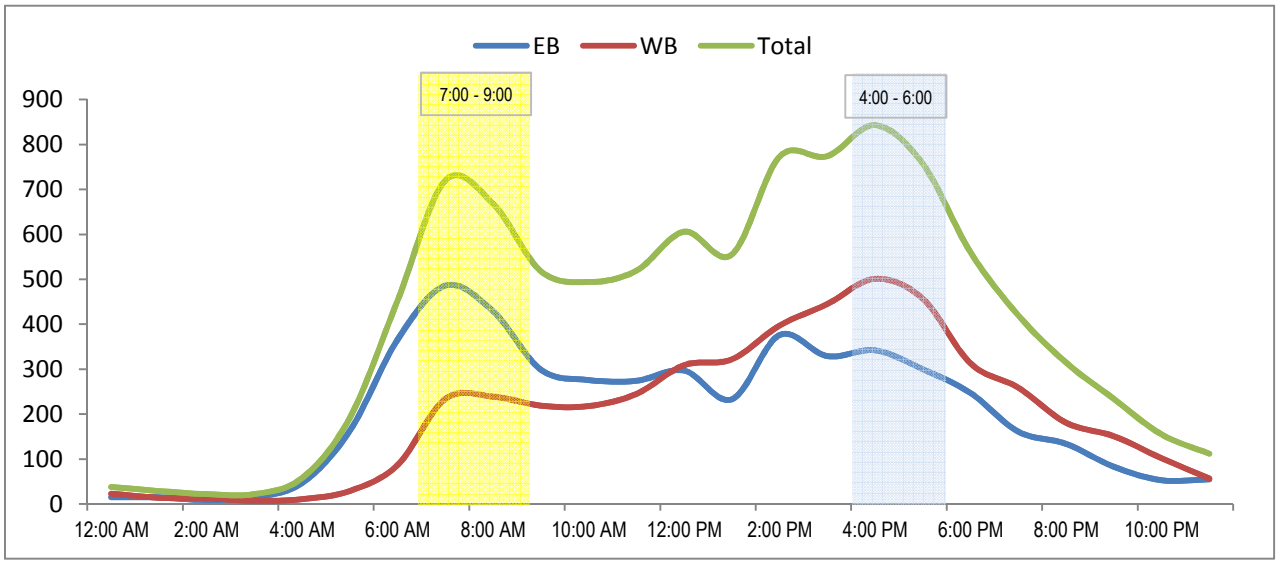
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*9,837*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	15	23	38
1:00 AM - 2:00 AM	15	14	29
2:00 AM - 3:00 AM	9	13	22
3:00 AM - 4:00 AM	15	7	22
4:00 AM - 5:00 AM	47	11	58
5:00 AM - 6:00 AM	163	29	192
6:00 AM - 7:00 AM	366	87	453
7:00 AM - 8:00 AM	486	234	720
8:00 AM - 9:00 AM	429	239	668
9:00 AM - 10:00 AM	299	219	518
10:00 AM - 11:00 AM	276	218	494
11:00 AM - 12:00 PM	274	245	519
Total	**2,394**	**1,339**	**3,733**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	297	309	606
1:00 PM - 2:00 PM	233	322	555
2:00 PM - 3:00 PM	376	397	773
3:00 PM - 4:00 PM	329	445	774
4:00 PM - 5:00 PM	342	501	843
5:00 PM - 6:00 PM	300	457	757
6:00 PM - 7:00 PM	247	313	560
7:00 PM - 8:00 PM	161	259	420
8:00 PM - 9:00 PM	134	181	315
9:00 PM - 10:00 PM	83	151	234
10:00 PM - 11:00 PM	53	102	155
11:00 PM - 12:00 AM	55	57	112
Total	**2,610**	**3,494**	**6,104**

24-Hour	*EB*	*Volume*	*5,004*	*24-Hour*	*WB*	*Volume*	*4,833*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 26. Skyline Dr, sourth of Lincoln St

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

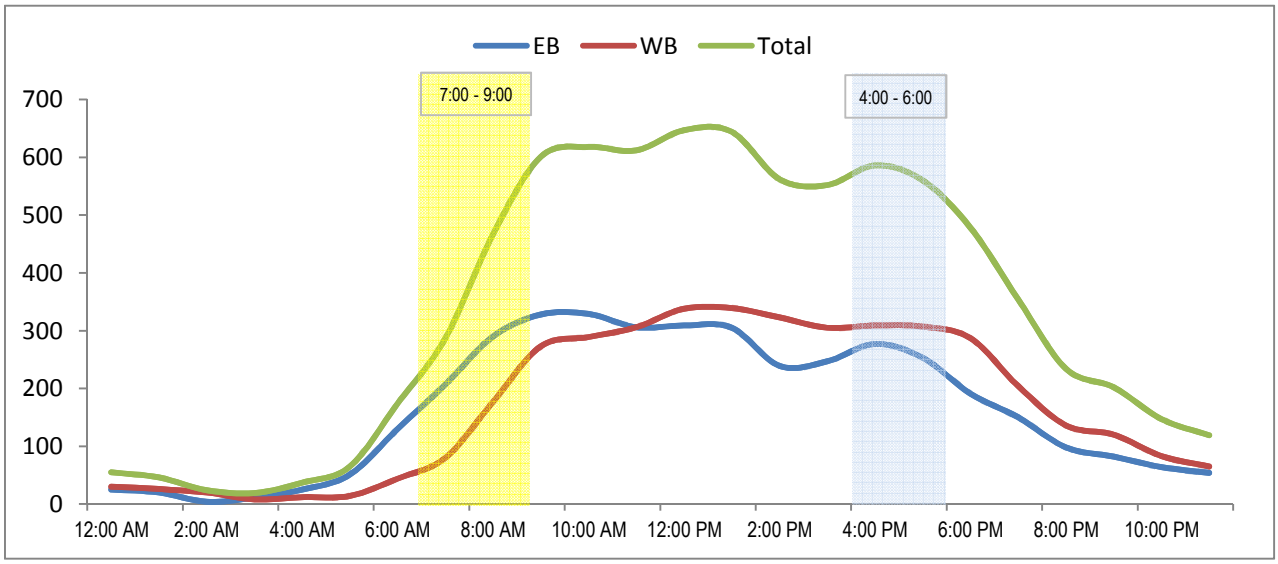
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***8,090***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	25	30	55
1:00 AM - 2:00 AM	20	26	46
2:00 AM - 3:00 AM	4	20	24
3:00 AM - 4:00 AM	11	8	19
4:00 AM - 5:00 AM	25	12	37
5:00 AM - 6:00 AM	51	14	65
6:00 AM - 7:00 AM	130	44	174
7:00 AM - 8:00 AM	207	80	287
8:00 AM - 9:00 AM	290	177	467
9:00 AM - 10:00 AM	328	273	601
10:00 AM - 11:00 AM	329	289	618
11:00 AM - 12:00 PM	306	306	612
Total	**1,726**	**1,279**	**3,005**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	309	338	647
1:00 PM - 2:00 PM	305	339	644
2:00 PM - 3:00 PM	239	323	562
3:00 PM - 4:00 PM	247	305	552
4:00 PM - 5:00 PM	277	309	586
5:00 PM - 6:00 PM	253	307	560
6:00 PM - 7:00 PM	191	287	478
7:00 PM - 8:00 PM	150	204	354
8:00 PM - 9:00 PM	98	136	234
9:00 PM - 10:00 PM	82	120	202
10:00 PM - 11:00 PM	64	83	147
11:00 PM - 12:00 AM	54	65	119
Total	**2,269**	**2,816**	**5,085**

24-Hour	***EB***	***Volume***	***3,995***	***24-Hour***	***WB***	***Volume***	***4,095***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 26. Skyline Dr, sourth of Lincoln St

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

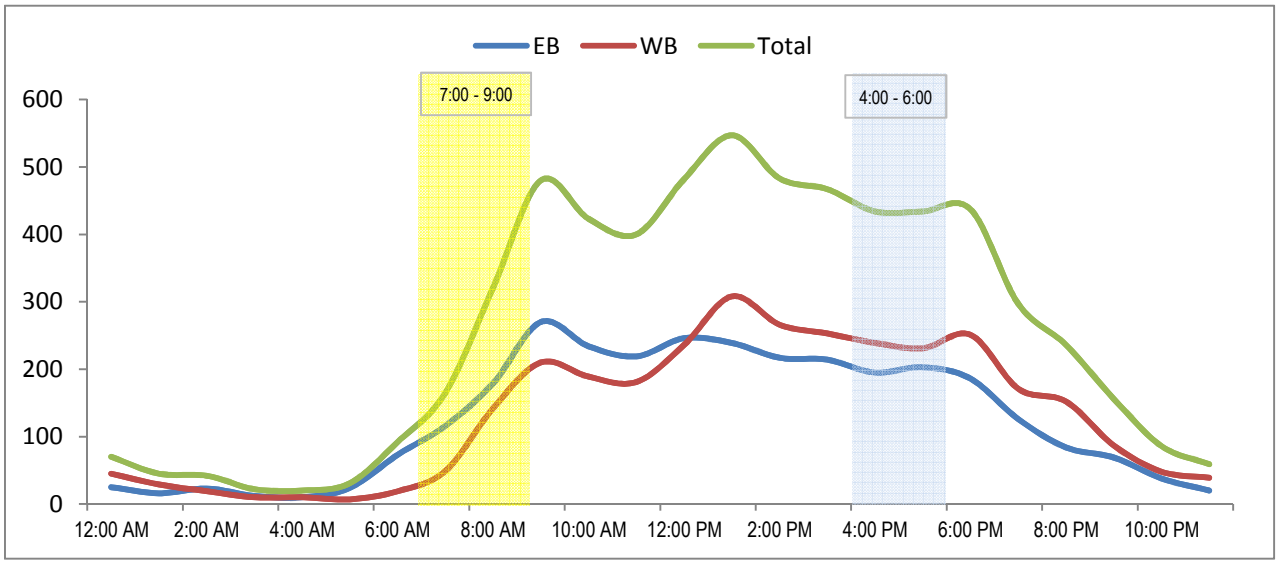
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***6,229***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	25	45	70
1:00 AM - 2:00 AM	16	29	45
2:00 AM - 3:00 AM	23	19	42
3:00 AM - 4:00 AM	12	10	22
4:00 AM - 5:00 AM	10	10	20
5:00 AM - 6:00 AM	24	7	31
6:00 AM - 7:00 AM	73	19	92
7:00 AM - 8:00 AM	116	49	165
8:00 AM - 9:00 AM	179	142	321
9:00 AM - 10:00 AM	270	210	480
10:00 AM - 11:00 AM	234	189	423
11:00 AM - 12:00 PM	219	181	400
Total	**1,201**	**910**	**2,111**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	246	236	482
1:00 PM - 2:00 PM	239	308	547
2:00 PM - 3:00 PM	217	266	483
3:00 PM - 4:00 PM	214	253	467
4:00 PM - 5:00 PM	195	239	434
5:00 PM - 6:00 PM	203	231	434
6:00 PM - 7:00 PM	186	251	437
7:00 PM - 8:00 PM	126	171	297
8:00 PM - 9:00 PM	84	152	236
9:00 PM - 10:00 PM	69	87	156
10:00 PM - 11:00 PM	38	48	86
11:00 PM - 12:00 AM	20	39	59
Total	**1,837**	**2,281**	**4,118**

24-Hour	***EB***	***Volume***	***3,038***	***24-Hour***	***WB***	***Volume***	***3,191***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

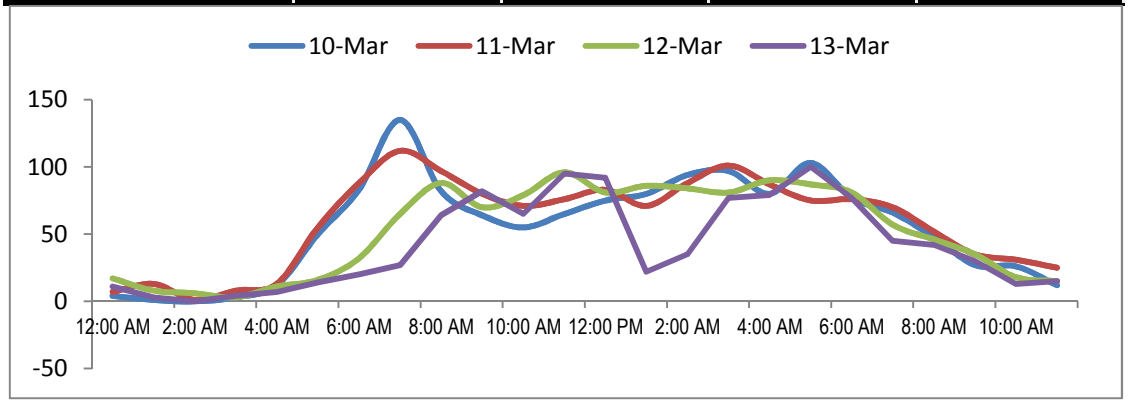
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 27. Washington between Golden Ave and Roy St
Orientation: *North-South*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***1,256***
Highest Daily Traffic	***1,415***

Time			Hourly Volume			
			10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM	-	1:00 AM	4	7	17	11
1:00 AM	-	2:00 AM	1	13	8	3
2:00 AM	-	3:00 AM	0	1	6	0
3:00 AM	-	4:00 AM	3	8	3	4
4:00 AM	-	5:00 AM	12	13	11	7
5:00 AM	-	6:00 AM	50	55	16	14
6:00 AM	-	7:00 AM	83	88	32	20
7:00 AM	-	8:00 AM	135	112	65	27
8:00 AM	-	9:00 AM	82	97	88	64
9:00 AM	-	10:00 AM	64	80	70	82
10:00 AM	-	11:00 AM	55	71	79	65
11:00 AM	-	12:00 PM	65	76	96	95
12:00 PM	-	1:00 PM	75	83	81	92
1:00 PM	-	2:00 PM	80	71	86	22
2:00 PM	-	3:00 PM	94	88	84	35
3:00 PM	-	4:00 PM	97	101	81	77
4:00 PM	-	5:00 PM	80	87	90	79
5:00 PM	-	6:00 PM	103	75	87	100
6:00 PM	-	7:00 PM	77	76	81	77
7:00 PM	-	8:00 PM	66	70	57	45
8:00 PM	-	9:00 PM	48	52	46	42
9:00 PM	-	10:00 PM	27	35	35	30
10:00 PM	-	11:00 PM	26	31	18	13
11:00 PM	-	12:00 AM	12	25	15	15
Total			**1,339**	**1,415**	**1,252**	**1,019**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 27. Washington between Golden Ave and Roy St

Orientation: *North-South*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

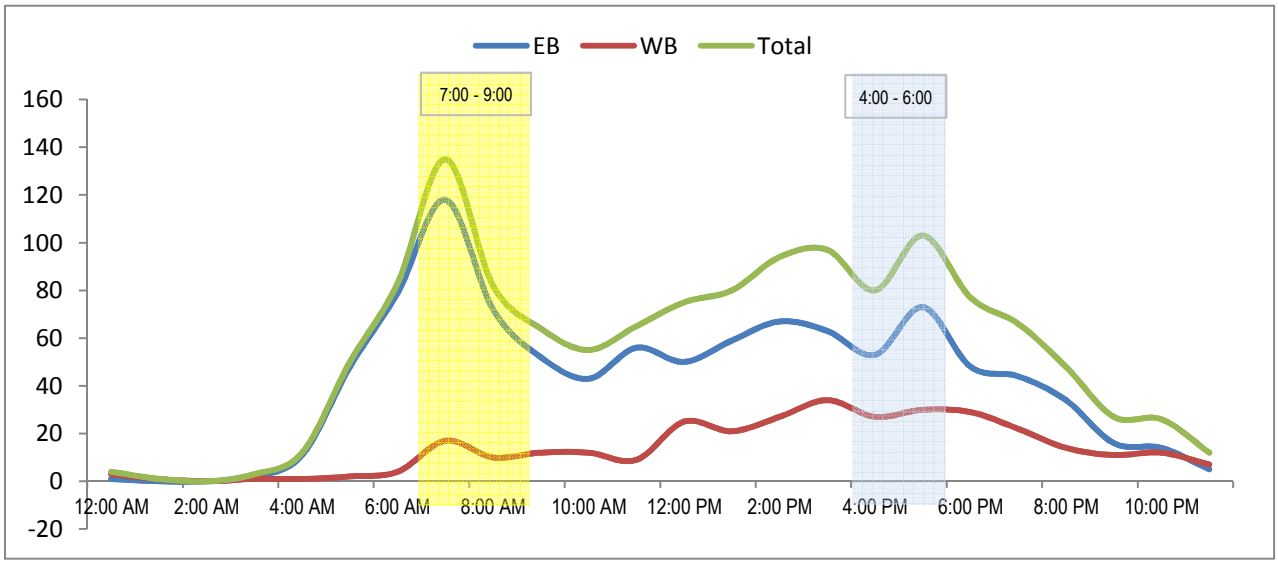
AVC Proj. No: *16-0493*

24 Hour Segment Volume			1,339

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	3	4
1:00 AM - 2:00 AM	0	1	1
2:00 AM - 3:00 AM	0	0	0
3:00 AM - 4:00 AM	2	1	3
4:00 AM - 5:00 AM	11	1	12
5:00 AM - 6:00 AM	48	2	50
6:00 AM - 7:00 AM	79	4	83
7:00 AM - 8:00 AM	118	17	135
8:00 AM - 9:00 AM	72	10	82
9:00 AM - 10:00 AM	52	12	64
10:00 AM - 11:00 AM	43	12	55
11:00 AM - 12:00 PM	56	9	65
Total	**482**	**72**	**554**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	50	25	75
1:00 PM - 2:00 PM	59	21	80
2:00 PM - 3:00 PM	67	27	94
3:00 PM - 4:00 PM	63	34	97
4:00 PM - 5:00 PM	53	27	80
5:00 PM - 6:00 PM	73	30	103
6:00 PM - 7:00 PM	48	29	77
7:00 PM - 8:00 PM	44	22	66
8:00 PM - 9:00 PM	34	14	48
9:00 PM - 10:00 PM	16	11	27
10:00 PM - 11:00 PM	14	12	26
11:00 PM - 12:00 AM	5	7	12
Total	**526**	**259**	**785**

24-Hour EB Volume	1,008	24-Hour WB Volume	331



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 27. Washington between Golden Ave and Roy St

Orientation: *North-South*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

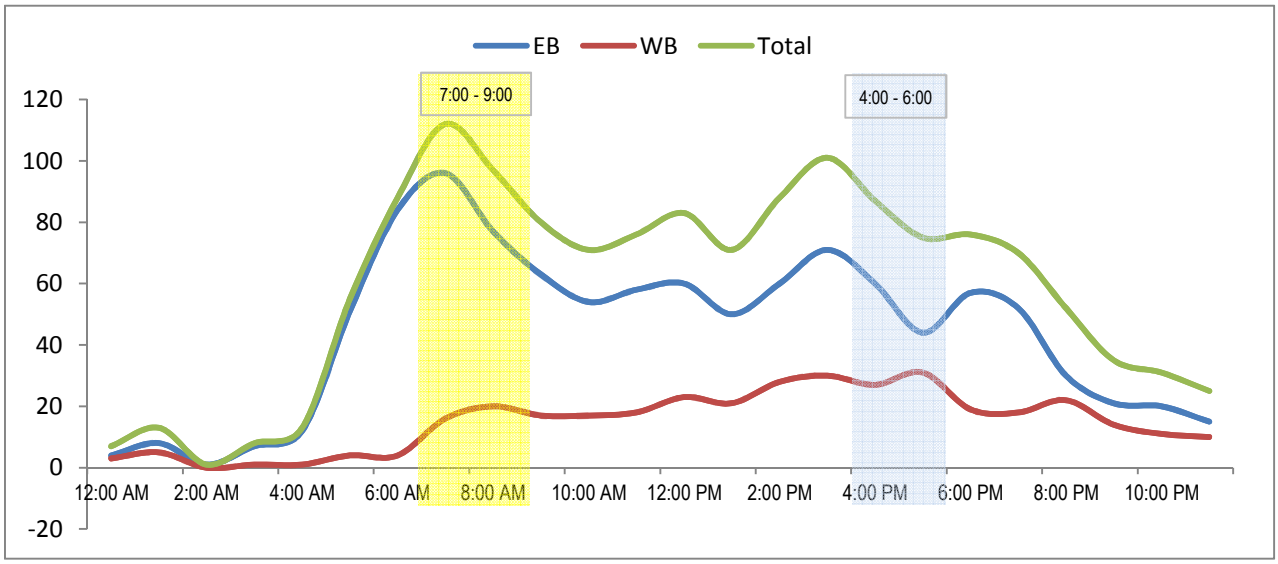
AVC Proj. No: *16-0493*

24 Hour Segment Volume			1,415

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	3	7
1:00 AM - 2:00 AM	8	5	13
2:00 AM - 3:00 AM	1	0	1
3:00 AM - 4:00 AM	7	1	8
4:00 AM - 5:00 AM	12	1	13
5:00 AM - 6:00 AM	51	4	55
6:00 AM - 7:00 AM	84	4	88
7:00 AM - 8:00 AM	96	16	112
8:00 AM - 9:00 AM	77	20	97
9:00 AM - 10:00 AM	63	17	80
10:00 AM - 11:00 AM	54	17	71
11:00 AM - 12:00 PM	58	18	76
Total	**515**	**106**	**621**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	60	23	83
1:00 PM - 2:00 PM	50	21	71
2:00 PM - 3:00 PM	60	28	88
3:00 PM - 4:00 PM	71	30	101
4:00 PM - 5:00 PM	60	27	87
5:00 PM - 6:00 PM	44	31	75
6:00 PM - 7:00 PM	57	19	76
7:00 PM - 8:00 PM	52	18	70
8:00 PM - 9:00 PM	30	22	52
9:00 PM - 10:00 PM	21	14	35
10:00 PM - 11:00 PM	20	11	31
11:00 PM - 12:00 AM	15	10	25
Total	**540**	**254**	**794**

24-Hour	*EB*	*Volume*	*1,055*	*24-Hour*	*WB*	*Volume*	*360*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 27. Washington between Golden Ave and Roy St

Orientation: *North-South*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

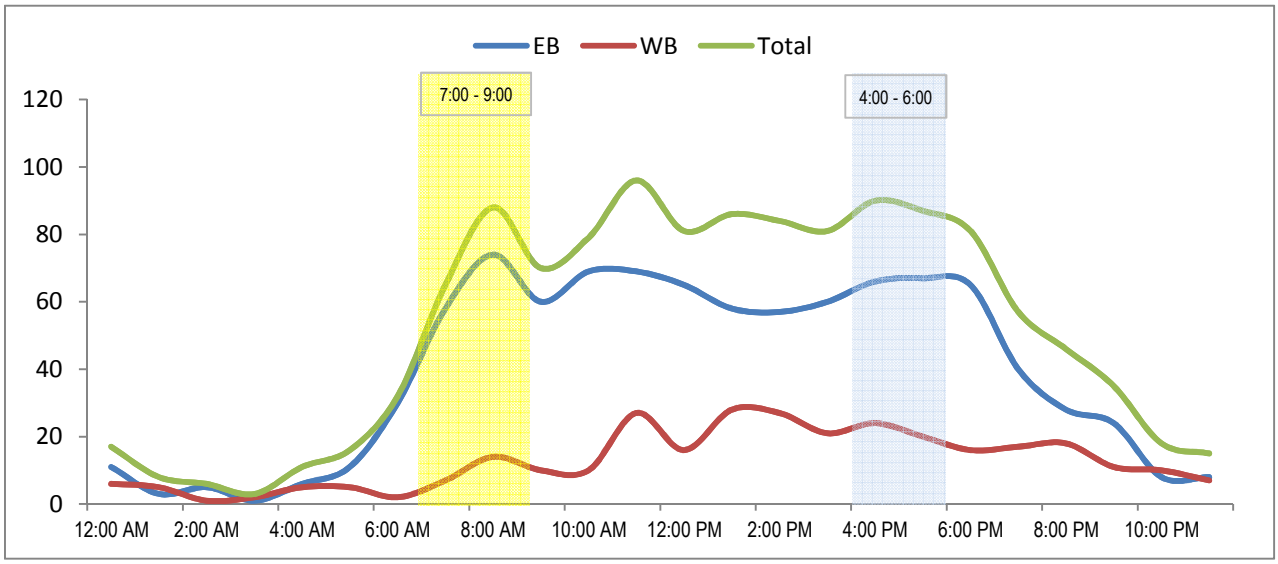
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,252*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	11	6	17
1:00 AM - 2:00 AM	3	5	8
2:00 AM - 3:00 AM	5	1	6
3:00 AM - 4:00 AM	1	2	3
4:00 AM - 5:00 AM	6	5	11
5:00 AM - 6:00 AM	11	5	16
6:00 AM - 7:00 AM	30	2	32
7:00 AM - 8:00 AM	58	7	65
8:00 AM - 9:00 AM	74	14	88
9:00 AM - 10:00 AM	60	10	70
10:00 AM - 11:00 AM	69	10	79
11:00 AM - 12:00 PM	69	27	96
Total	**397**	**94**	**491**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	65	16	81
1:00 PM - 2:00 PM	58	28	86
2:00 PM - 3:00 PM	57	27	84
3:00 PM - 4:00 PM	60	21	81
4:00 PM - 5:00 PM	66	24	90
5:00 PM - 6:00 PM	67	20	87
6:00 PM - 7:00 PM	65	16	81
7:00 PM - 8:00 PM	40	17	57
8:00 PM - 9:00 PM	28	18	46
9:00 PM - 10:00 PM	24	11	35
10:00 PM - 11:00 PM	8	10	18
11:00 PM - 12:00 AM	8	7	15
Total	**546**	**215**	**761**

24-Hour	*EB*	*Volume*	*943*	*24-Hour*	*WB*	*Volume*	*309*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 27. Washington between Golden Ave and Roy St

Orientation: *North-South*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

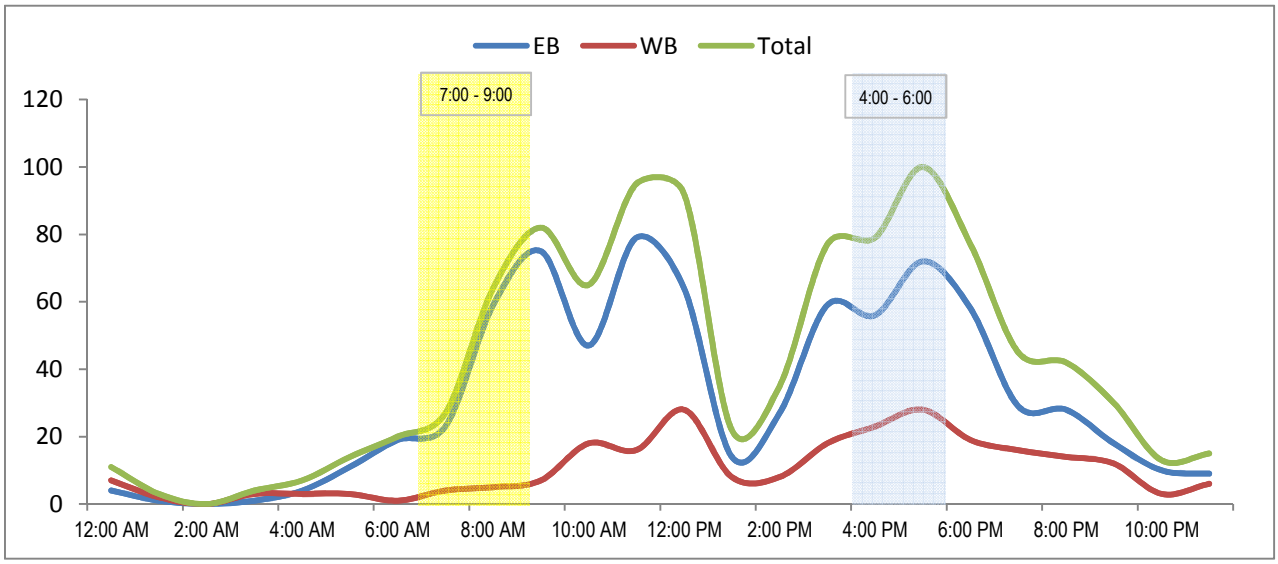
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,019*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	7	11
1:00 AM - 2:00 AM	1	2	3
2:00 AM - 3:00 AM	0	0	0
3:00 AM - 4:00 AM	1	3	4
4:00 AM - 5:00 AM	4	3	7
5:00 AM - 6:00 AM	11	3	14
6:00 AM - 7:00 AM	19	1	20
7:00 AM - 8:00 AM	23	4	27
8:00 AM - 9:00 AM	59	5	64
9:00 AM - 10:00 AM	75	7	82
10:00 AM - 11:00 AM	47	18	65
11:00 AM - 12:00 PM	79	16	95
Total	**323**	**69**	**392**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	64	28	92
1:00 PM - 2:00 PM	14	8	22
2:00 PM - 3:00 PM	27	8	35
3:00 PM - 4:00 PM	59	18	77
4:00 PM - 5:00 PM	56	23	79
5:00 PM - 6:00 PM	72	28	100
6:00 PM - 7:00 PM	58	19	77
7:00 PM - 8:00 PM	29	16	45
8:00 PM - 9:00 PM	28	14	42
9:00 PM - 10:00 PM	18	12	30
10:00 PM - 11:00 PM	10	3	13
11:00 PM - 12:00 AM	9	6	15
Total	**444**	**183**	**627**

24-Hour	*EB*	*Volume*	*767*	*24-Hour*	*WB*	*Volume*	*252*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

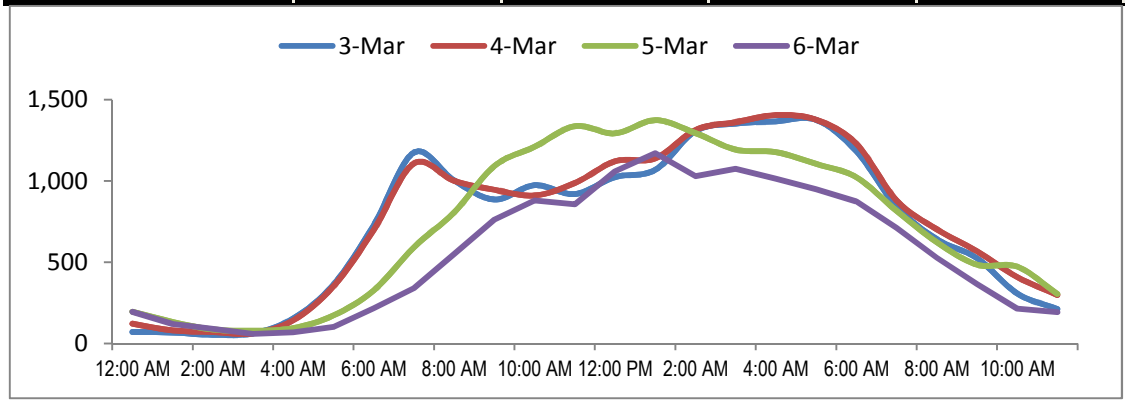
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 28. Lemon Grove Ave between Central Ave and Golden Ave
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***16,672***
Highest Daily Traffic	***18,291***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	71	122	196	195
1:00 AM - 2:00 AM	68	81	133	121
2:00 AM - 3:00 AM	54	71	87	91
3:00 AM - 4:00 AM	63	63	79	60
4:00 AM - 5:00 AM	154	143	95	69
5:00 AM - 6:00 AM	363	352	173	103
6:00 AM - 7:00 AM	728	699	327	217
7:00 AM - 8:00 AM	1,175	1,108	592	340
8:00 AM - 9:00 AM	1,003	1,001	807	552
9:00 AM - 10:00 AM	886	946	1,092	762
10:00 AM - 11:00 AM	974	911	1,211	881
11:00 AM - 12:00 PM	920	987	1,337	857
12:00 PM - 1:00 PM	1,024	1,121	1,293	1,060
1:00 PM - 2:00 PM	1,069	1,139	1,374	1,171
2:00 PM - 3:00 PM	1,307	1,314	1,295	1,029
3:00 PM - 4:00 PM	1,353	1,362	1,193	1,076
4:00 PM - 5:00 PM	1,367	1,405	1,178	1,014
5:00 PM - 6:00 PM	1,376	1,377	1,105	949
6:00 PM - 7:00 PM	1,184	1,229	1,023	875
7:00 PM - 8:00 PM	844	881	817	710
8:00 PM - 9:00 PM	642	703	624	528
9:00 PM - 10:00 PM	525	568	485	364
10:00 PM - 11:00 PM	308	409	473	215
11:00 PM - 12:00 AM	212	299	305	193
Total	**17,670**	**18,291**	**17,294**	**13,432**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 28. Lemon Grove Ave between Central Ave and Golden Ave

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

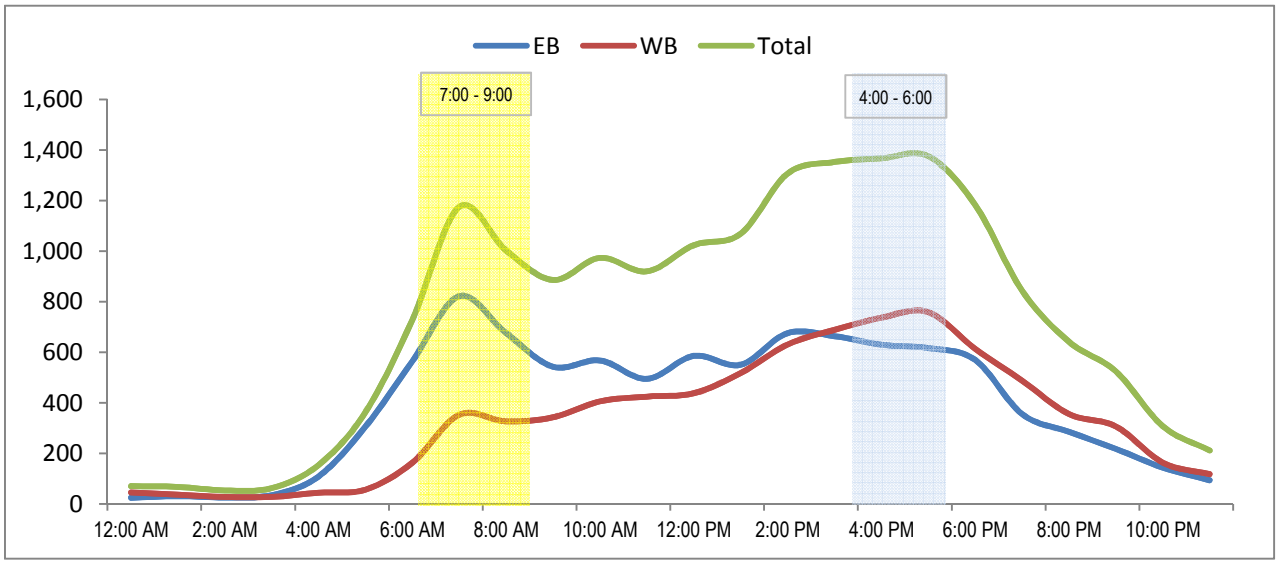
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*17,670*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	25	46	71
1:00 AM - 2:00 AM	31	37	68
2:00 AM - 3:00 AM	26	28	54
3:00 AM - 4:00 AM	35	28	63
4:00 AM - 5:00 AM	109	45	154
5:00 AM - 6:00 AM	306	57	363
6:00 AM - 7:00 AM	565	163	728
7:00 AM - 8:00 AM	822	353	1,175
8:00 AM - 9:00 AM	676	327	1,003
9:00 AM - 10:00 AM	543	343	886
10:00 AM - 11:00 AM	568	406	974
11:00 AM - 12:00 PM	495	425	920
Total	**4,201**	**2,258**	**6,459**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	586	438	1,024
1:00 PM - 2:00 PM	551	518	1,069
2:00 PM - 3:00 PM	676	631	1,307
3:00 PM - 4:00 PM	664	689	1,353
4:00 PM - 5:00 PM	630	737	1,367
5:00 PM - 6:00 PM	617	759	1,376
6:00 PM - 7:00 PM	570	614	1,184
7:00 PM - 8:00 PM	356	488	844
8:00 PM - 9:00 PM	286	356	642
9:00 PM - 10:00 PM	218	307	525
10:00 PM - 11:00 PM	144	164	308
11:00 PM - 12:00 AM	94	118	212
Total	**5,392**	**5,819**	**11,211**

24-Hour	*EB*	*Volume*	*9,593*	*24-Hour*	*WB*	*Volume*	*8,077*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 28. Lemon Grove Ave between Central Ave and Golden Ave

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

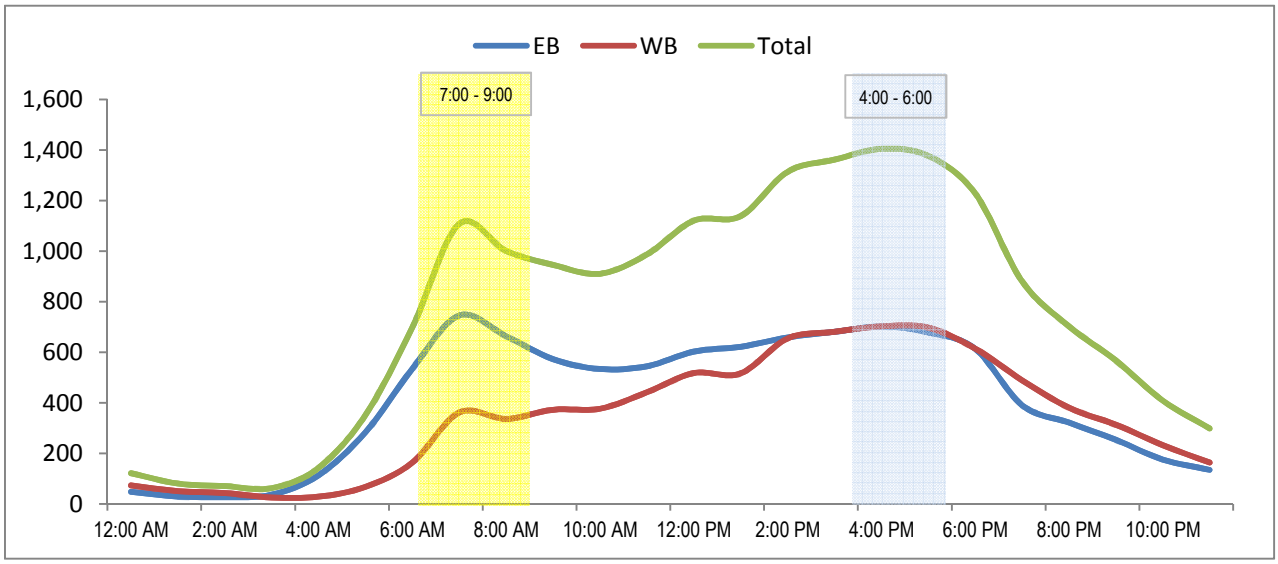
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,291*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	48	74	122
1:00 AM - 2:00 AM	30	51	81
2:00 AM - 3:00 AM	27	44	71
3:00 AM - 4:00 AM	37	26	63
4:00 AM - 5:00 AM	114	29	143
5:00 AM - 6:00 AM	284	68	352
6:00 AM - 7:00 AM	535	164	699
7:00 AM - 8:00 AM	746	362	1,108
8:00 AM - 9:00 AM	664	337	1,001
9:00 AM - 10:00 AM	573	373	946
10:00 AM - 11:00 AM	534	377	911
11:00 AM - 12:00 PM	545	442	987
Total	**4,137**	**2,347**	**6,484**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	603	518	1,121
1:00 PM - 2:00 PM	622	517	1,139
2:00 PM - 3:00 PM	659	655	1,314
3:00 PM - 4:00 PM	681	681	1,362
4:00 PM - 5:00 PM	702	703	1,405
5:00 PM - 6:00 PM	679	698	1,377
6:00 PM - 7:00 PM	614	615	1,229
7:00 PM - 8:00 PM	391	490	881
8:00 PM - 9:00 PM	322	381	703
9:00 PM - 10:00 PM	254	314	568
10:00 PM - 11:00 PM	176	233	409
11:00 PM - 12:00 AM	135	164	299
Total	**5,838**	**5,969**	**11,807**

24-Hour	*EB*	*Volume*	*9,975*	*24-Hour*	*WB*	*Volume*	*8,316*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 28. Lemon Grove Ave between Central Ave and Golden Ave

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

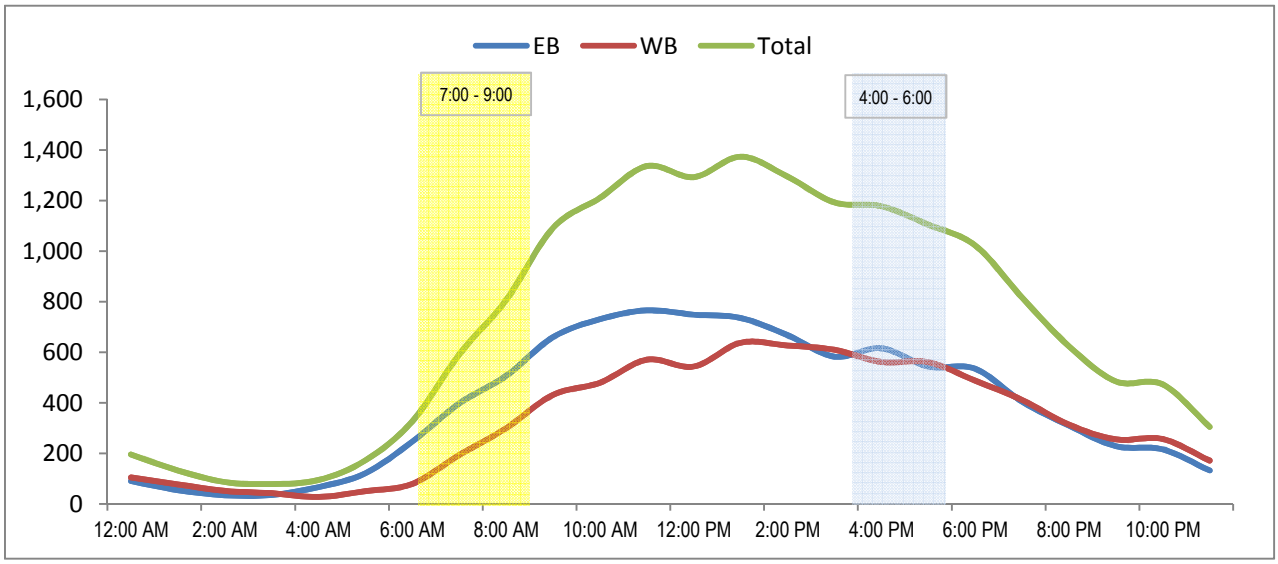
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*17,294*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	91	105	196
1:00 AM - 2:00 AM	55	78	133
2:00 AM - 3:00 AM	35	52	87
3:00 AM - 4:00 AM	36	43	79
4:00 AM - 5:00 AM	67	28	95
5:00 AM - 6:00 AM	122	51	173
6:00 AM - 7:00 AM	247	80	327
7:00 AM - 8:00 AM	398	194	592
8:00 AM - 9:00 AM	507	300	807
9:00 AM - 10:00 AM	660	432	1,092
10:00 AM - 11:00 AM	731	480	1,211
11:00 AM - 12:00 PM	766	571	1337
Total	**3,715**	**2,414**	**6,129**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	749	544	1,293
1:00 PM - 2:00 PM	736	638	1,374
2:00 PM - 3:00 PM	668	627	1,295
3:00 PM - 4:00 PM	583	610	1,193
4:00 PM - 5:00 PM	616	562	1,178
5:00 PM - 6:00 PM	544	561	1,105
6:00 PM - 7:00 PM	535	488	1,023
7:00 PM - 8:00 PM	405	412	817
8:00 PM - 9:00 PM	310	314	624
9:00 PM - 10:00 PM	229	256	485
10:00 PM - 11:00 PM	216	257	473
11:00 PM - 12:00 AM	133	172	305
Total	**5,724**	**5,441**	**11,165**

24-Hour	*EB*	*Volume*	*9,439*	*24-Hour*	*WB*	*Volume*	*7,855*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 28. Lemon Grove Ave between Central Ave and Golden Ave

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

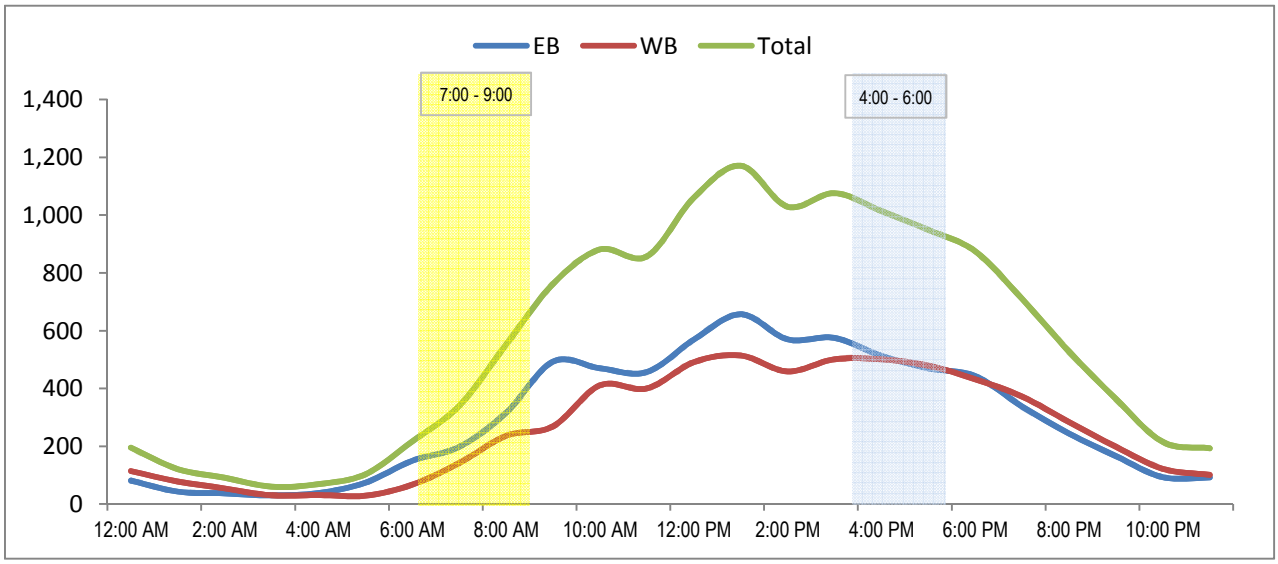
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*13,432*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	81	114	195
1:00 AM - 2:00 AM	43	78	121
2:00 AM - 3:00 AM	37	54	91
3:00 AM - 4:00 AM	30	30	60
4:00 AM - 5:00 AM	38	31	69
5:00 AM - 6:00 AM	74	29	103
6:00 AM - 7:00 AM	150	67	217
7:00 AM - 8:00 AM	198	142	340
8:00 AM - 9:00 AM	316	236	552
9:00 AM - 10:00 AM	493	269	762
10:00 AM - 11:00 AM	470	411	881
11:00 AM - 12:00 PM	457	400	857
Total	**2,387**	**1,861**	**4,248**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	569	491	1,060
1:00 PM - 2:00 PM	657	514	1,171
2:00 PM - 3:00 PM	570	459	1,029
3:00 PM - 4:00 PM	575	501	1,076
4:00 PM - 5:00 PM	513	501	1,014
5:00 PM - 6:00 PM	470	479	949
6:00 PM - 7:00 PM	443	432	875
7:00 PM - 8:00 PM	338	372	710
8:00 PM - 9:00 PM	244	284	528
9:00 PM - 10:00 PM	166	198	364
10:00 PM - 11:00 PM	93	122	215
11:00 PM - 12:00 AM	92	101	193
Total	**4,730**	**4,454**	**9,184**

24-Hour	*EB*	*Volume*	*7,117*	*24-Hour*	*WB*	*Volume*	*6,315*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

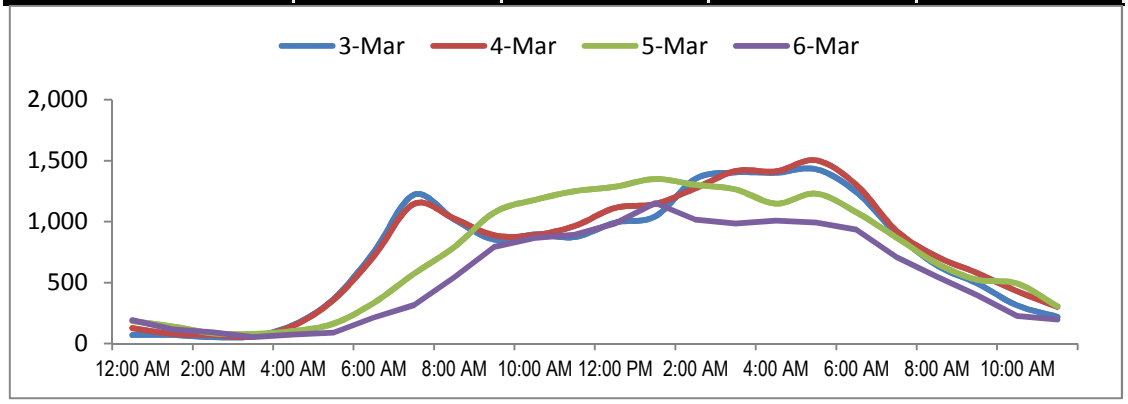
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 29. Lemon Grove Ave, South of Lincoln St
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***16,809***
Highest Daily Traffic	***18,575***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	70	127	183	192
1:00 AM - 2:00 AM	71	79	140	117
2:00 AM - 3:00 AM	52	72	85	91
3:00 AM - 4:00 AM	60	57	79	54
4:00 AM - 5:00 AM	152	145	102	74
5:00 AM - 6:00 AM	363	357	163	89
6:00 AM - 7:00 AM	750	715	333	213
7:00 AM - 8:00 AM	1,220	1,145	573	315
8:00 AM - 9:00 AM	1,019	1,025	790	543
9:00 AM - 10:00 AM	852	888	1,076	794
10:00 AM - 11:00 AM	895	890	1,178	866
11:00 AM - 12:00 PM	874	965	1,250	892
12:00 PM - 1:00 PM	992	1,112	1,286	986
1:00 PM - 2:00 PM	1,043	1,145	1,350	1,153
2:00 PM - 3:00 PM	1,351	1,274	1,302	1,016
3:00 PM - 4:00 PM	1,404	1,415	1,264	985
4:00 PM - 5:00 PM	1,401	1,412	1,148	1,008
5:00 PM - 6:00 PM	1,430	1,503	1,230	992
6:00 PM - 7:00 PM	1,243	1,302	1,077	934
7:00 PM - 8:00 PM	902	924	869	710
8:00 PM - 9:00 PM	642	714	658	548
9:00 PM - 10:00 PM	494	579	524	396
10:00 PM - 11:00 PM	313	428	492	225
11:00 PM - 12:00 AM	220	302	306	198
Total	**17,813**	**18,575**	**17,458**	**13,391**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 29. Lemon Grove Ave, South of Lincoln St

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

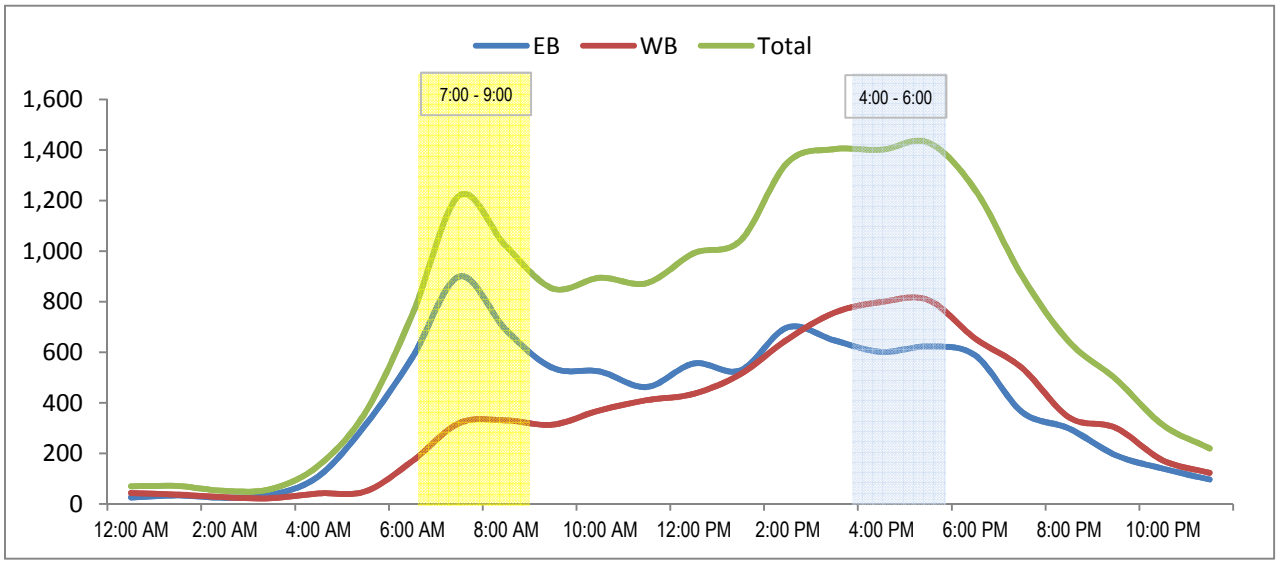
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***17,813***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	26	44	70
1:00 AM - 2:00 AM	34	37	71
2:00 AM - 3:00 AM	25	27	52
3:00 AM - 4:00 AM	37	23	60
4:00 AM - 5:00 AM	110	42	152
5:00 AM - 6:00 AM	313	50	363
6:00 AM - 7:00 AM	580	170	750
7:00 AM - 8:00 AM	900	320	1,220
8:00 AM - 9:00 AM	688	331	1,019
9:00 AM - 10:00 AM	538	314	852
10:00 AM - 11:00 AM	524	371	895
11:00 AM - 12:00 PM	463	411	874
Total	**4,238**	**2,140**	**6,378**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	556	436	992
1:00 PM - 2:00 PM	529	514	1,043
2:00 PM - 3:00 PM	699	652	1,351
3:00 PM - 4:00 PM	647	757	1,404
4:00 PM - 5:00 PM	602	799	1,401
5:00 PM - 6:00 PM	623	807	1,430
6:00 PM - 7:00 PM	588	655	1,243
7:00 PM - 8:00 PM	364	538	902
8:00 PM - 9:00 PM	299	343	642
9:00 PM - 10:00 PM	193	301	494
10:00 PM - 11:00 PM	140	173	313
11:00 PM - 12:00 AM	97	123	220
Total	**5,337**	**6,098**	**11,435**

24-Hour	***EB***	***Volume***	***9,575***	***24-Hour***	***WB***	***Volume***	***8,238***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 29. Lemon Grove Ave, South of Lincoln St

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

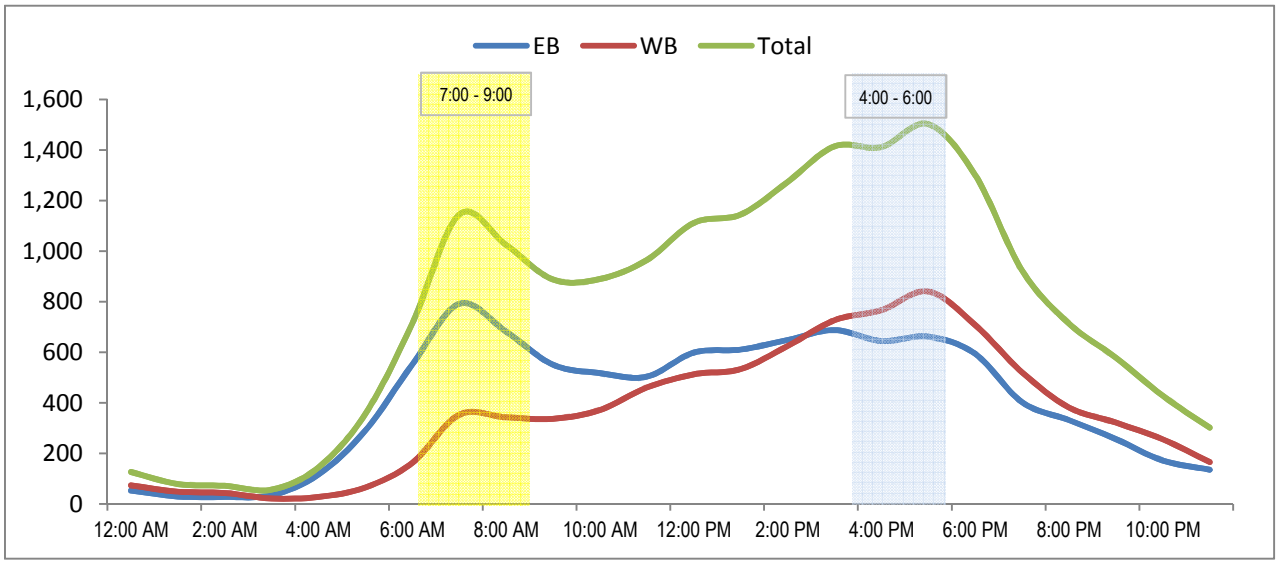
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*18,575*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	53	74	127
1:00 AM - 2:00 AM	30	49	79
2:00 AM - 3:00 AM	28	44	72
3:00 AM - 4:00 AM	35	22	57
4:00 AM - 5:00 AM	117	28	145
5:00 AM - 6:00 AM	291	66	357
6:00 AM - 7:00 AM	552	163	715
7:00 AM - 8:00 AM	792	353	1,145
8:00 AM - 9:00 AM	682	343	1,025
9:00 AM - 10:00 AM	551	337	888
10:00 AM - 11:00 AM	518	372	890
11:00 AM - 12:00 PM	504	461	965
Total	**4,153**	**2,312**	**6,465**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	599	513	1,112
1:00 PM - 2:00 PM	611	534	1,145
2:00 PM - 3:00 PM	649	625	1,274
3:00 PM - 4:00 PM	688	727	1,415
4:00 PM - 5:00 PM	645	767	1,412
5:00 PM - 6:00 PM	662	841	1,503
6:00 PM - 7:00 PM	594	708	1,302
7:00 PM - 8:00 PM	403	521	924
8:00 PM - 9:00 PM	332	382	714
9:00 PM - 10:00 PM	257	322	579
10:00 PM - 11:00 PM	172	256	428
11:00 PM - 12:00 AM	136	166	302
Total	**5,748**	**6,362**	**12,110**

24-Hour	*EB*	*Volume*	*9,901*	*24-Hour*	*WB*	*Volume*	*8,674*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 29. Lemon Grove Ave, South of Lincoln St

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

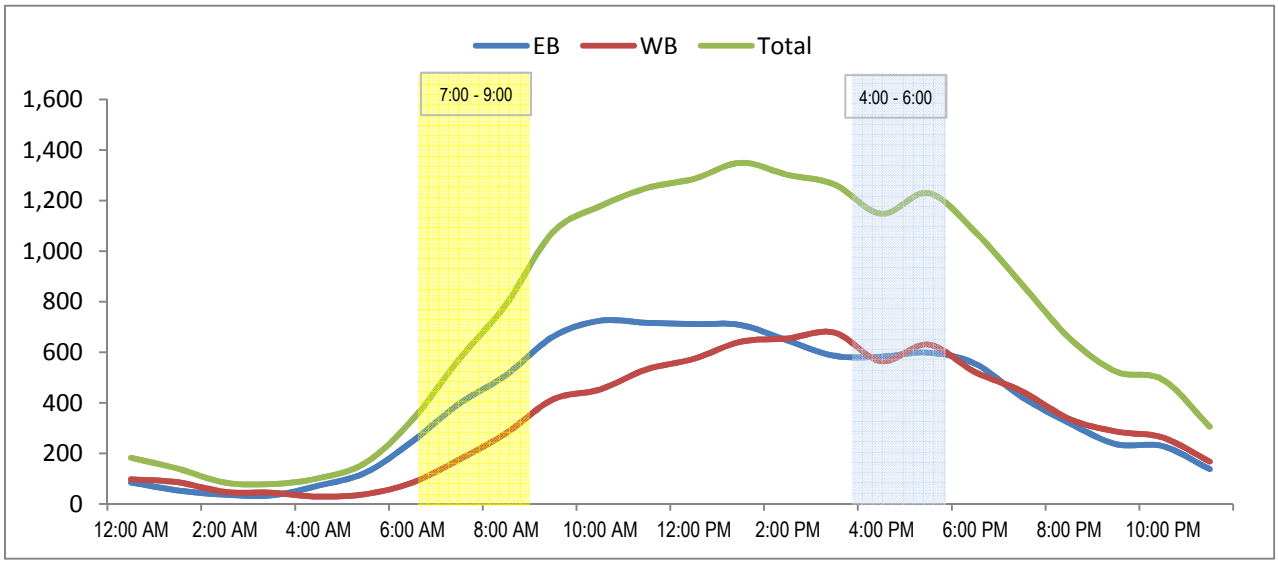
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*17,458*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	85	98	183
1:00 AM - 2:00 AM	54	86	140
2:00 AM - 3:00 AM	37	48	85
3:00 AM - 4:00 AM	34	45	79
4:00 AM - 5:00 AM	73	29	102
5:00 AM - 6:00 AM	124	39	163
6:00 AM - 7:00 AM	248	85	333
7:00 AM - 8:00 AM	397	176	573
8:00 AM - 9:00 AM	510	280	790
9:00 AM - 10:00 AM	662	414	1,076
10:00 AM - 11:00 AM	725	453	1,178
11:00 AM - 12:00 PM	717	533	1250
Total	**3,666**	**2,286**	**5,952**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	712	574	1,286
1:00 PM - 2:00 PM	708	642	1,350
2:00 PM - 3:00 PM	647	655	1,302
3:00 PM - 4:00 PM	586	678	1,264
4:00 PM - 5:00 PM	583	565	1,148
5:00 PM - 6:00 PM	599	631	1,230
6:00 PM - 7:00 PM	555	522	1,077
7:00 PM - 8:00 PM	423	446	869
8:00 PM - 9:00 PM	321	337	658
9:00 PM - 10:00 PM	237	287	524
10:00 PM - 11:00 PM	229	263	492
11:00 PM - 12:00 AM	138	168	306
Total	**5,738**	**5,768**	**11,506**

24-Hour	*EB*	*Volume*	*9,404*	*24-Hour*	*WB*	*Volume*	*8,054*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 29. Lemon Grove Ave, South of Lincoln St

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

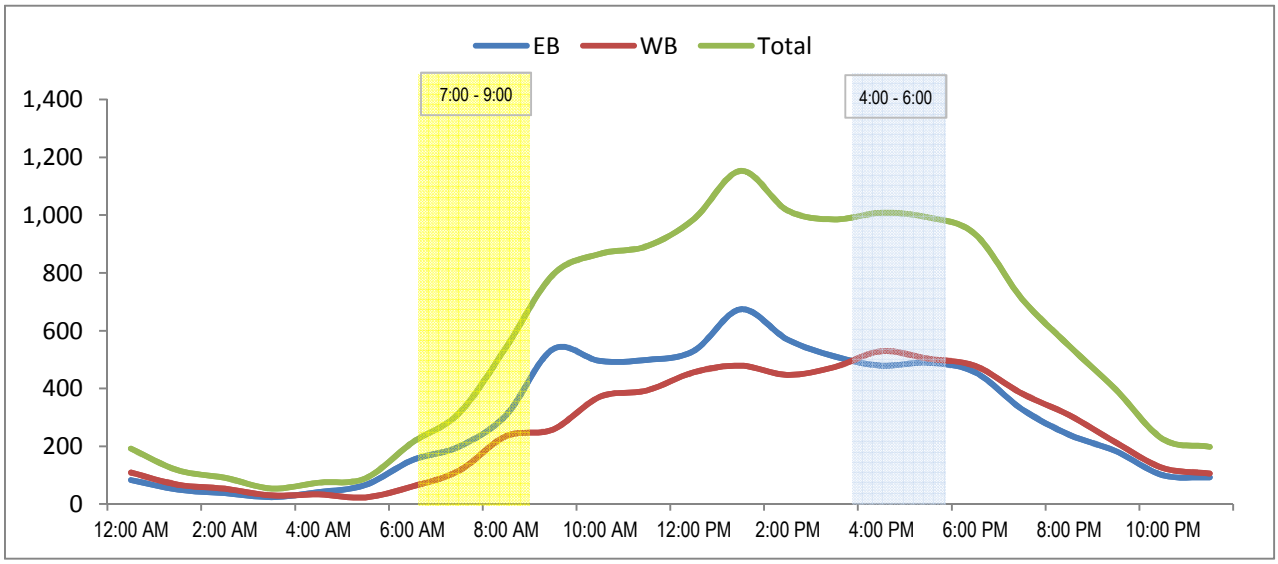
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*13,391*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	83	109	192
1:00 AM - 2:00 AM	50	67	117
2:00 AM - 3:00 AM	38	53	91
3:00 AM - 4:00 AM	24	30	54
4:00 AM - 5:00 AM	41	33	74
5:00 AM - 6:00 AM	66	23	89
6:00 AM - 7:00 AM	152	61	213
7:00 AM - 8:00 AM	199	116	315
8:00 AM - 9:00 AM	308	235	543
9:00 AM - 10:00 AM	536	258	794
10:00 AM - 11:00 AM	495	371	866
11:00 AM - 12:00 PM	499	393	892
Total	**2,491**	**1,749**	**4,240**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	530	456	986
1:00 PM - 2:00 PM	674	479	1,153
2:00 PM - 3:00 PM	569	447	1,016
3:00 PM - 4:00 PM	511	474	985
4:00 PM - 5:00 PM	479	529	1,008
5:00 PM - 6:00 PM	489	503	992
6:00 PM - 7:00 PM	456	478	934
7:00 PM - 8:00 PM	328	382	710
8:00 PM - 9:00 PM	240	308	548
9:00 PM - 10:00 PM	183	213	396
10:00 PM - 11:00 PM	100	125	225
11:00 PM - 12:00 AM	92	106	198
Total	**4,651**	**4,500**	**9,151**

24-Hour	*EB*	*Volume*	*7,142*	*24-Hour*	*WB*	*Volume*	*6,249*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

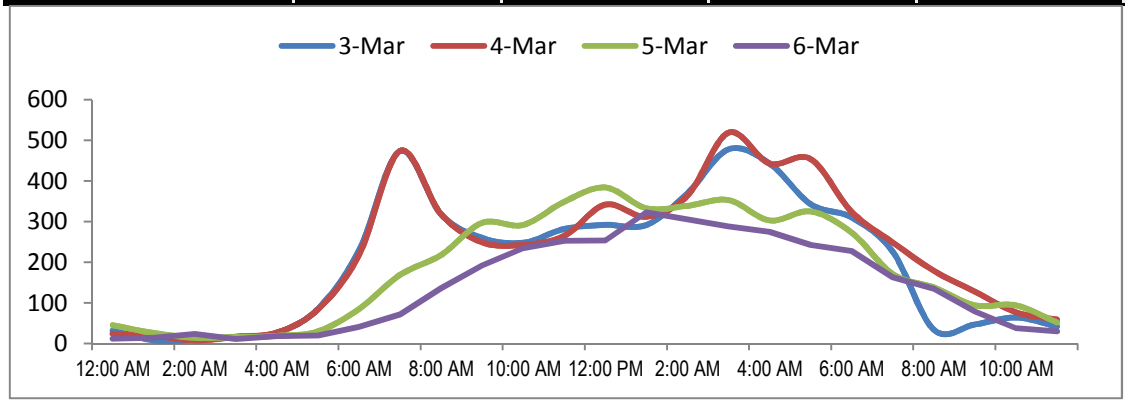
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 30. Buena Vista Ave between Church St and Central St
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***4,534***
Highest Daily Traffic	***5,396***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	32	24	45	12
1:00 AM - 2:00 AM	8	19	26	14
2:00 AM - 3:00 AM	9	8	14	24
3:00 AM - 4:00 AM	16	17	16	11
4:00 AM - 5:00 AM	27	27	19	18
5:00 AM - 6:00 AM	85	84	30	20
6:00 AM - 7:00 AM	229	218	85	41
7:00 AM - 8:00 AM	474	474	169	72
8:00 AM - 9:00 AM	318	318	218	136
9:00 AM - 10:00 AM	260	249	297	192
10:00 AM - 11:00 AM	248	243	292	235
11:00 AM - 12:00 PM	282	265	349	253
12:00 PM - 1:00 PM	292	342	384	254
1:00 PM - 2:00 PM	292	312	333	323
2:00 PM - 3:00 PM	370	364	339	306
3:00 PM - 4:00 PM	478	519	353	288
4:00 PM - 5:00 PM	443	443	303	275
5:00 PM - 6:00 PM	343	454	325	243
6:00 PM - 7:00 PM	310	324	273	228
7:00 PM - 8:00 PM	226	249	171	163
8:00 PM - 9:00 PM	34	179	138	135
9:00 PM - 10:00 PM	47	128	94	79
10:00 PM - 11:00 PM	64	77	94	38
11:00 PM - 12:00 AM	42	59	52	30
Total	**4,929**	**5,396**	**4,419**	**3,390**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 30. Buena Vista Ave between Church St and Central St

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

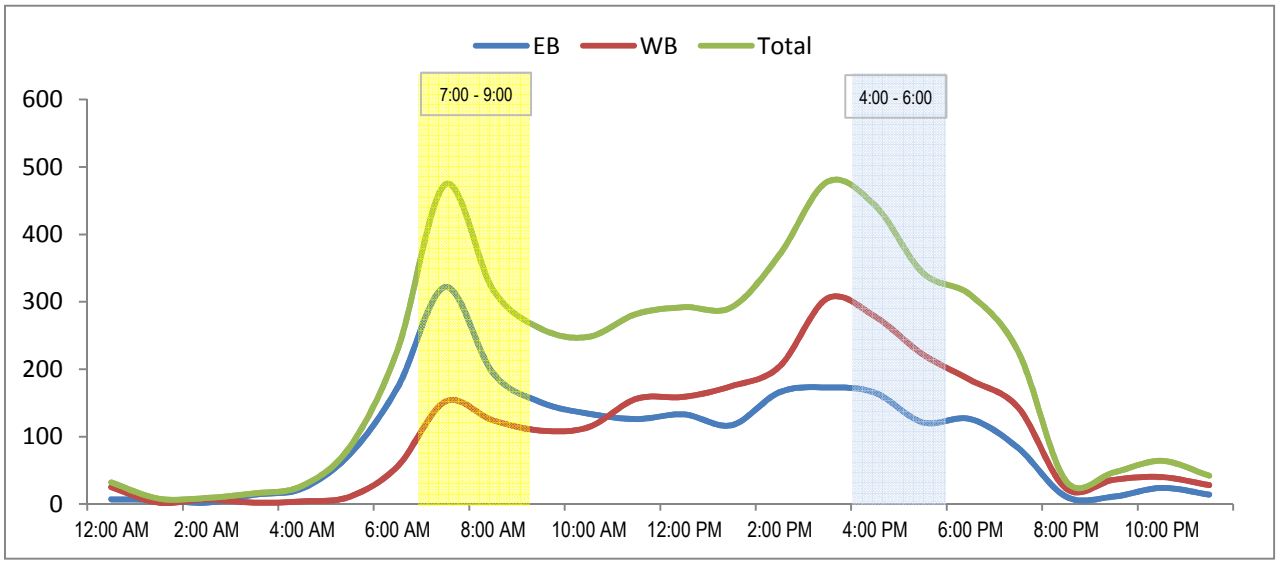
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***4,929***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	7	25	32
1:00 AM - 2:00 AM	6	2	8
2:00 AM - 3:00 AM	2	7	9
3:00 AM - 4:00 AM	14	2	16
4:00 AM - 5:00 AM	23	4	27
5:00 AM - 6:00 AM	74	11	85
6:00 AM - 7:00 AM	173	56	229
7:00 AM - 8:00 AM	322	152	474
8:00 AM - 9:00 AM	194	124	318
9:00 AM - 10:00 AM	151	109	260
10:00 AM - 11:00 AM	134	114	248
11:00 AM - 12:00 PM	126	156	282
Total	**1,226**	**762**	**1,988**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	133	159	292
1:00 PM - 2:00 PM	117	175	292
2:00 PM - 3:00 PM	166	204	370
3:00 PM - 4:00 PM	173	305	478
4:00 PM - 5:00 PM	165	278	443
5:00 PM - 6:00 PM	121	222	343
6:00 PM - 7:00 PM	126	184	310
7:00 PM - 8:00 PM	83	143	226
8:00 PM - 9:00 PM	11	23	34
9:00 PM - 10:00 PM	11	36	47
10:00 PM - 11:00 PM	24	40	64
11:00 PM - 12:00 AM	14	28	42
Total	**1,144**	**1,797**	**2,941**

24-Hour	***EB***	***Volume***	***2,370***	***24-Hour***	***WB***	***Volume***	***2,559***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 30. Buena Vista Ave between Church St and Central St

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

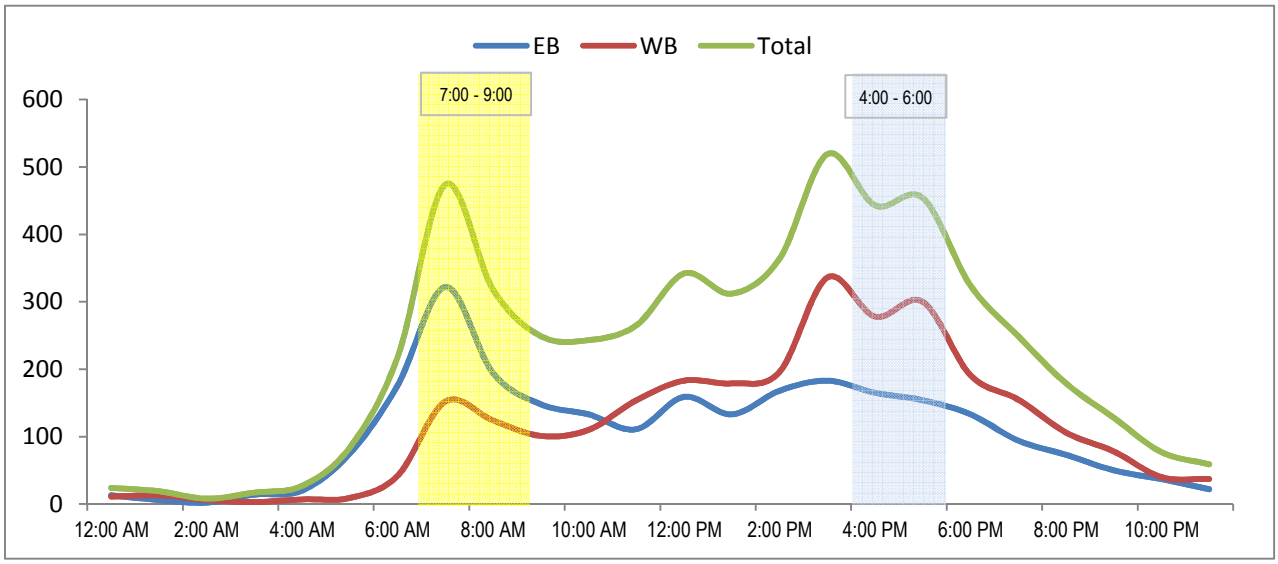
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*5,396*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	13	11	24
1:00 AM - 2:00 AM	6	13	19
2:00 AM - 3:00 AM	2	6	8
3:00 AM - 4:00 AM	14	3	17
4:00 AM - 5:00 AM	20	7	27
5:00 AM - 6:00 AM	75	9	84
6:00 AM - 7:00 AM	176	42	218
7:00 AM - 8:00 AM	322	152	474
8:00 AM - 9:00 AM	194	124	318
9:00 AM - 10:00 AM	148	101	249
10:00 AM - 11:00 AM	133	110	243
11:00 AM - 12:00 PM	111	154	265
Total	**1,214**	**732**	**1,946**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	159	183	342
1:00 PM - 2:00 PM	133	179	312
2:00 PM - 3:00 PM	168	196	364
3:00 PM - 4:00 PM	183	336	519
4:00 PM - 5:00 PM	165	278	443
5:00 PM - 6:00 PM	154	300	454
6:00 PM - 7:00 PM	133	191	324
7:00 PM - 8:00 PM	94	155	249
8:00 PM - 9:00 PM	73	106	179
9:00 PM - 10:00 PM	50	78	128
10:00 PM - 11:00 PM	37	40	77
11:00 PM - 12:00 AM	22	37	59
Total	**1,371**	**2,079**	**3,450**

24-Hour	*EB*	*Volume*	*2,585*	*24-Hour*	*WB*	*Volume*	*2,811*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 30. Buena Vista Ave between Church St and Central St

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

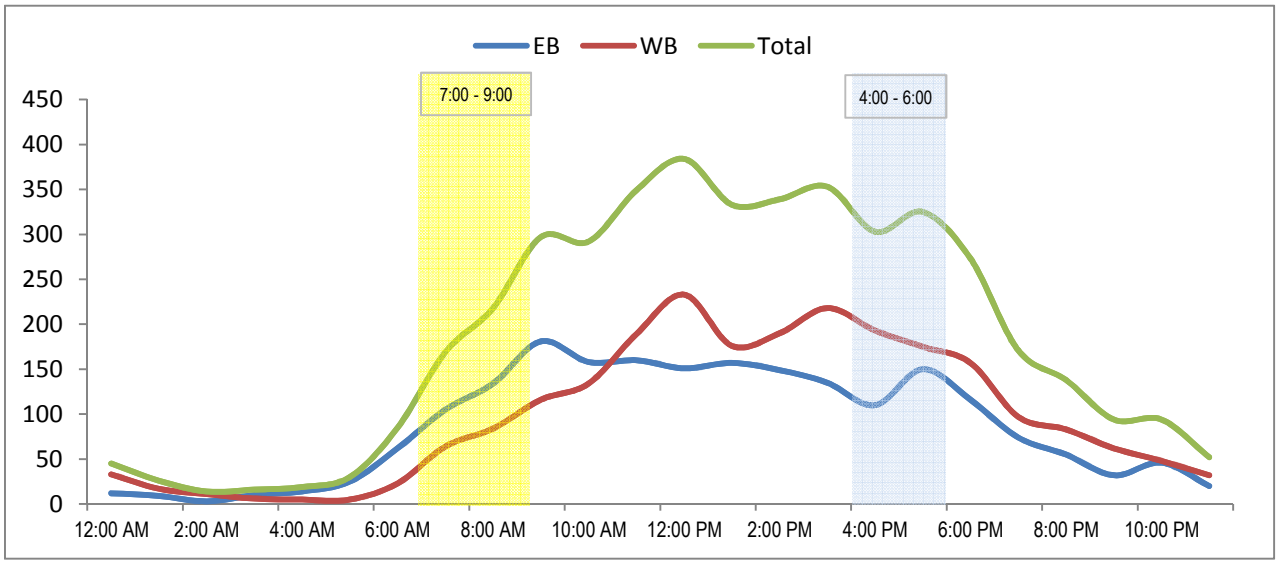
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,419*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	12	33	45
1:00 AM - 2:00 AM	9	17	26
2:00 AM - 3:00 AM	3	11	14
3:00 AM - 4:00 AM	10	6	16
4:00 AM - 5:00 AM	14	5	19
5:00 AM - 6:00 AM	25	5	30
6:00 AM - 7:00 AM	62	23	85
7:00 AM - 8:00 AM	105	64	169
8:00 AM - 9:00 AM	134	84	218
9:00 AM - 10:00 AM	181	116	297
10:00 AM - 11:00 AM	158	134	292
11:00 AM - 12:00 PM	160	189	349
Total	**873**	**687**	**1,560**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	151	233	384
1:00 PM - 2:00 PM	157	176	333
2:00 PM - 3:00 PM	149	190	339
3:00 PM - 4:00 PM	135	218	353
4:00 PM - 5:00 PM	110	193	303
5:00 PM - 6:00 PM	150	175	325
6:00 PM - 7:00 PM	116	157	273
7:00 PM - 8:00 PM	74	97	171
8:00 PM - 9:00 PM	55	83	138
9:00 PM - 10:00 PM	32	62	94
10:00 PM - 11:00 PM	46	48	94
11:00 PM - 12:00 AM	20	32	52
Total	**1,195**	**1,664**	**2,859**

24-Hour	*EB*	*Volume*	*2,068*	*24-Hour*	*WB*	*Volume*	*2,351*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 30. Buena Vista Ave between Church St and Central St

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

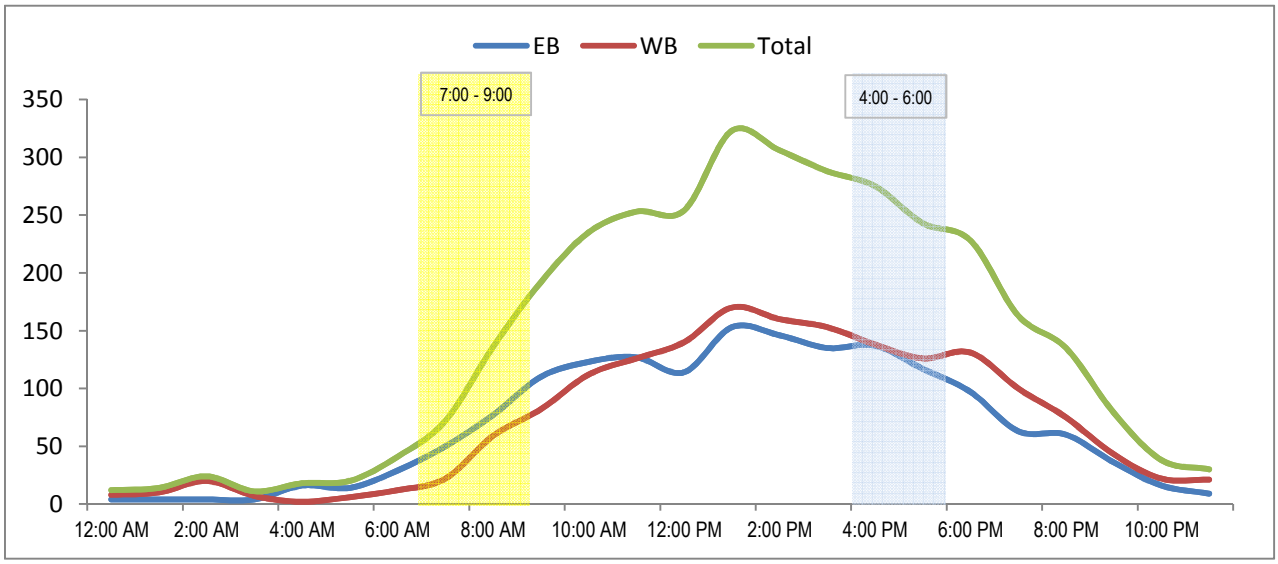
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*3,390*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	8	12
1:00 AM - 2:00 AM	4	10	14
2:00 AM - 3:00 AM	4	20	24
3:00 AM - 4:00 AM	4	7	11
4:00 AM - 5:00 AM	16	2	18
5:00 AM - 6:00 AM	14	6	20
6:00 AM - 7:00 AM	29	12	41
7:00 AM - 8:00 AM	50	22	72
8:00 AM - 9:00 AM	77	59	136
9:00 AM - 10:00 AM	110	82	192
10:00 AM - 11:00 AM	123	112	235
11:00 AM - 12:00 PM	127	126	253
Total	**562**	**466**	**1,028**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	114	140	254
1:00 PM - 2:00 PM	153	170	323
2:00 PM - 3:00 PM	146	160	306
3:00 PM - 4:00 PM	135	153	288
4:00 PM - 5:00 PM	137	138	275
5:00 PM - 6:00 PM	117	126	243
6:00 PM - 7:00 PM	97	131	228
7:00 PM - 8:00 PM	63	100	163
8:00 PM - 9:00 PM	60	75	135
9:00 PM - 10:00 PM	36	43	79
10:00 PM - 11:00 PM	16	22	38
11:00 PM - 12:00 AM	9	21	30
Total	**1,083**	**1,279**	**2,362**

24-Hour	*EB*	*Volume*	*1,645*	*24-Hour*	*WB*	*Volume*	*1,745*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

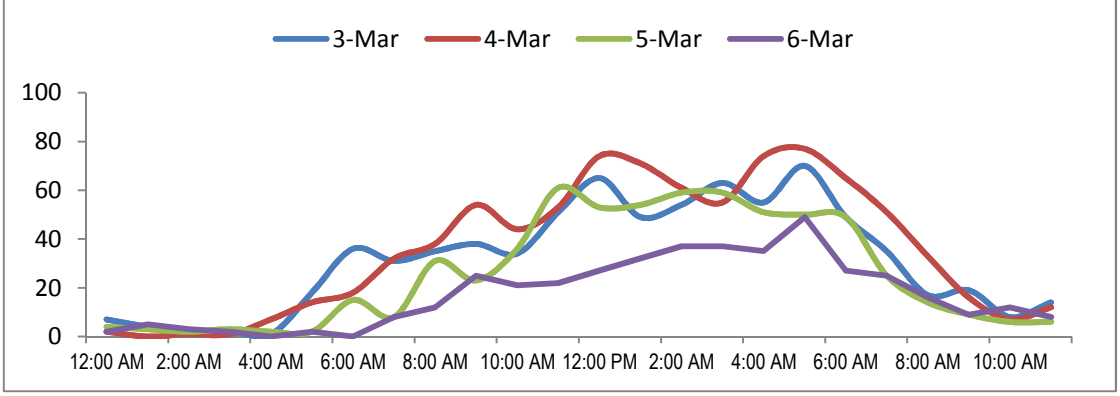
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 31. Vista Ave between Broadway and North Ave
Orientation: *North-South*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***664***
Highest Daily Traffic	***860***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	7	2	4	2
1:00 AM - 2:00 AM	4	0	3	5
2:00 AM - 3:00 AM	1	1	2	3
3:00 AM - 4:00 AM	2	1	3	2
4:00 AM - 5:00 AM	1	7	2	0
5:00 AM - 6:00 AM	18	14	2	2
6:00 AM - 7:00 AM	36	18	15	0
7:00 AM - 8:00 AM	31	32	8	8
8:00 AM - 9:00 AM	35	38	31	12
9:00 AM - 10:00 AM	38	54	23	25
10:00 AM - 11:00 AM	34	44	36	21
11:00 AM - 12:00 PM	51	53	61	22
12:00 PM - 1:00 PM	65	74	53	27
1:00 PM - 2:00 PM	49	71	54	32
2:00 PM - 3:00 PM	54	61	59	37
3:00 PM - 4:00 PM	63	55	59	37
4:00 PM - 5:00 PM	55	74	51	35
5:00 PM - 6:00 PM	70	77	50	49
6:00 PM - 7:00 PM	49	65	49	27
7:00 PM - 8:00 PM	35	51	25	25
8:00 PM - 9:00 PM	17	33	14	16
9:00 PM - 10:00 PM	19	16	9	9
10:00 PM - 11:00 PM	8	7	6	12
11:00 PM - 12:00 AM	14	12	6	8
Total	**756**	**860**	**625**	**416**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 31. Vista Ave between Broadway and North Ave

Orientation: *North-South*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

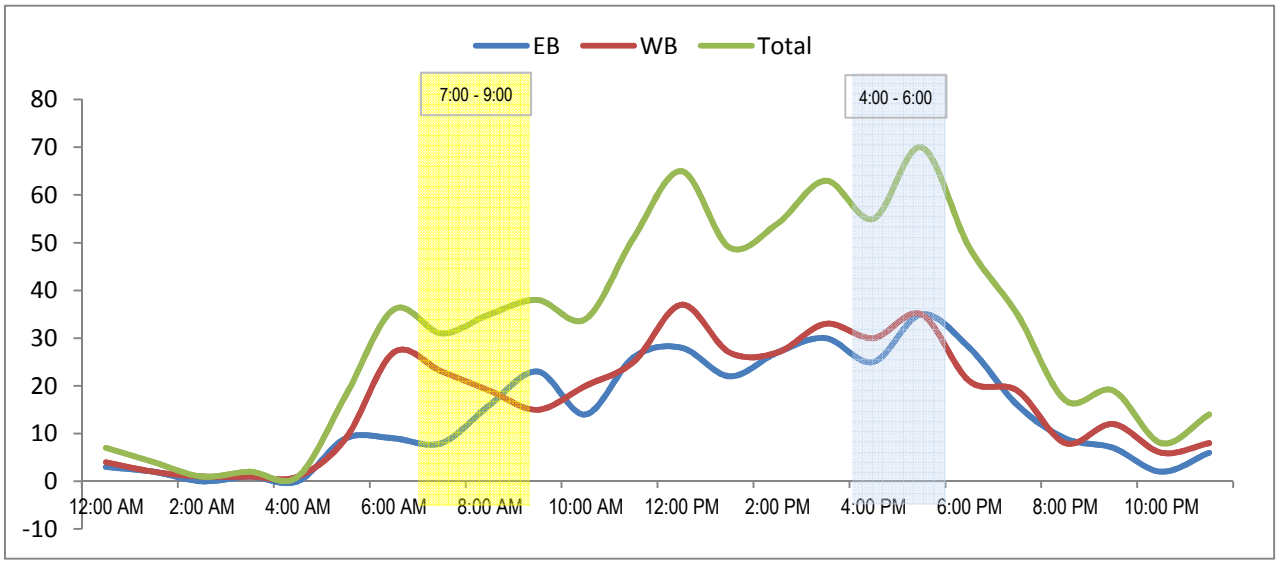
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*756*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	3	4	7
1:00 AM - 2:00 AM	2	2	4
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	1	1	2
4:00 AM - 5:00 AM	0	1	1
5:00 AM - 6:00 AM	9	9	18
6:00 AM - 7:00 AM	9	27	36
7:00 AM - 8:00 AM	8	23	31
8:00 AM - 9:00 AM	16	19	35
9:00 AM - 10:00 AM	23	15	38
10:00 AM - 11:00 AM	14	20	34
11:00 AM - 12:00 PM	26	25	51
Total	**111**	**147**	**258**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	28	37	65
1:00 PM - 2:00 PM	22	27	49
2:00 PM - 3:00 PM	27	27	54
3:00 PM - 4:00 PM	30	33	63
4:00 PM - 5:00 PM	25	30	55
5:00 PM - 6:00 PM	35	35	70
6:00 PM - 7:00 PM	28	21	49
7:00 PM - 8:00 PM	16	19	35
8:00 PM - 9:00 PM	9	8	17
9:00 PM - 10:00 PM	7	12	19
10:00 PM - 11:00 PM	2	6	8
11:00 PM - 12:00 AM	6	8	14
Total	**235**	**263**	**498**

24-Hour	*EB*	*Volume*	*346*	*24-Hour*	*WB*	*Volume*	*410*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 31. Vista Ave between Broadway and North Ave

Orientation: *North-South*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

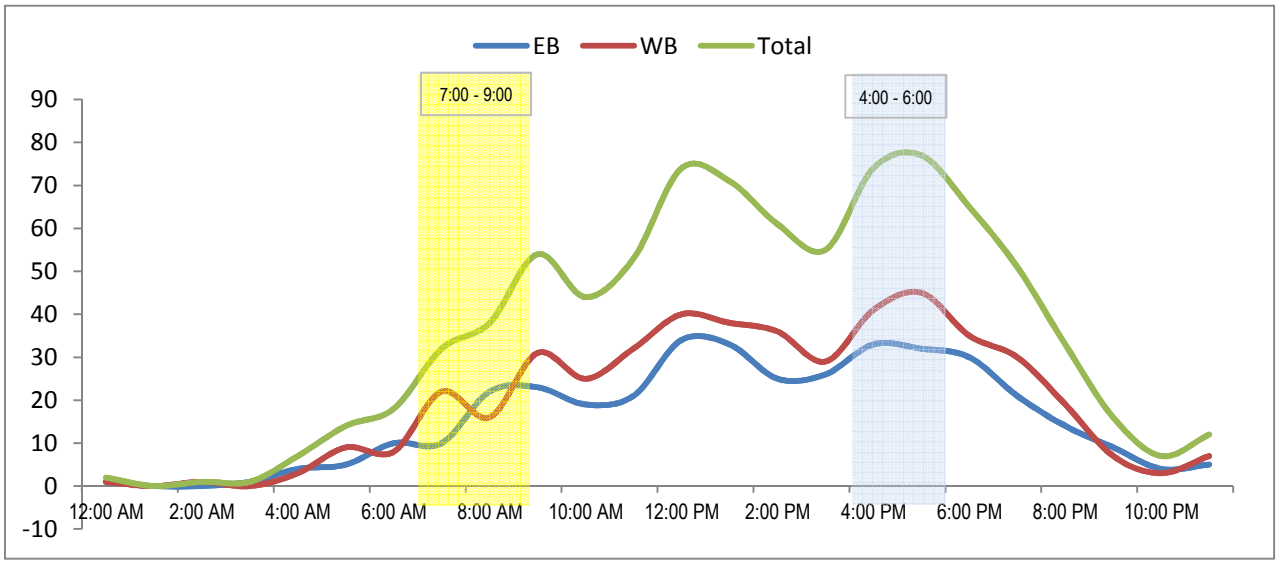
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*860*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	1	2
1:00 AM - 2:00 AM	0	0	0
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	1	0	1
4:00 AM - 5:00 AM	4	3	7
5:00 AM - 6:00 AM	5	9	14
6:00 AM - 7:00 AM	10	8	18
7:00 AM - 8:00 AM	10	22	32
8:00 AM - 9:00 AM	22	16	38
9:00 AM - 10:00 AM	23	31	54
10:00 AM - 11:00 AM	19	25	44
11:00 AM - 12:00 PM	21	32	53
Total	**116**	**148**	**264**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	34	40	74
1:00 PM - 2:00 PM	33	38	71
2:00 PM - 3:00 PM	25	36	61
3:00 PM - 4:00 PM	26	29	55
4:00 PM - 5:00 PM	33	41	74
5:00 PM - 6:00 PM	32	45	77
6:00 PM - 7:00 PM	30	35	65
7:00 PM - 8:00 PM	21	30	51
8:00 PM - 9:00 PM	14	19	33
9:00 PM - 10:00 PM	9	7	16
10:00 PM - 11:00 PM	4	3	7
11:00 PM - 12:00 AM	5	7	12
Total	**266**	**330**	**596**

24-Hour	*EB*	*Volume*	*382*	*24-Hour*	*WB*	*Volume*	*478*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 31. Vista Ave between Broadway and North Ave

Orientation: *North-South*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

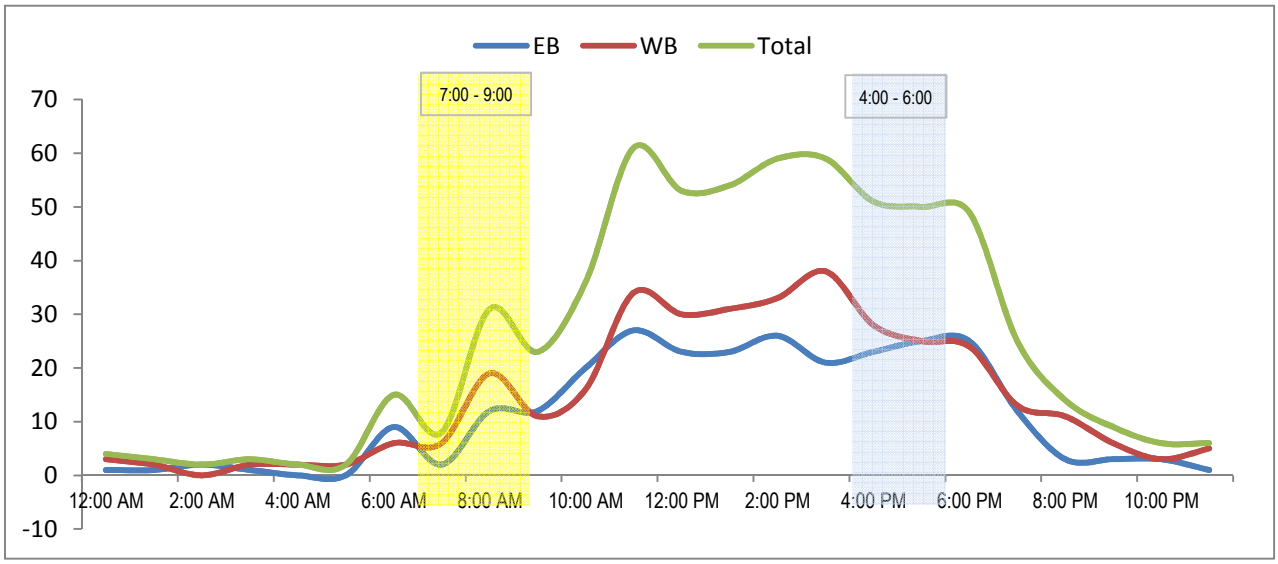
AVC Proj. No: *16-0493*

24 Hour Segment Volume			625

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	3	4
1:00 AM - 2:00 AM	1	2	3
2:00 AM - 3:00 AM	2	0	2
3:00 AM - 4:00 AM	1	2	3
4:00 AM - 5:00 AM	0	2	2
5:00 AM - 6:00 AM	0	2	2
6:00 AM - 7:00 AM	9	6	15
7:00 AM - 8:00 AM	2	6	8
8:00 AM - 9:00 AM	12	19	31
9:00 AM - 10:00 AM	12	11	23
10:00 AM - 11:00 AM	20	16	36
11:00 AM - 12:00 PM	27	34	61
Total	**87**	**103**	**190**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	23	30	53
1:00 PM - 2:00 PM	23	31	54
2:00 PM - 3:00 PM	26	33	59
3:00 PM - 4:00 PM	21	38	59
4:00 PM - 5:00 PM	23	28	51
5:00 PM - 6:00 PM	25	25	50
6:00 PM - 7:00 PM	25	24	49
7:00 PM - 8:00 PM	12	13	25
8:00 PM - 9:00 PM	3	11	14
9:00 PM - 10:00 PM	3	6	9
10:00 PM - 11:00 PM	3	3	6
11:00 PM - 12:00 AM	1	5	6
Total	**188**	**247**	**435**

24-Hour	*EB*	*Volume*	*275*	*24-Hour*	*WB*	*Volume*	*350*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 31. Vista Ave between Broadway and North Ave

Orientation: *North-South*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

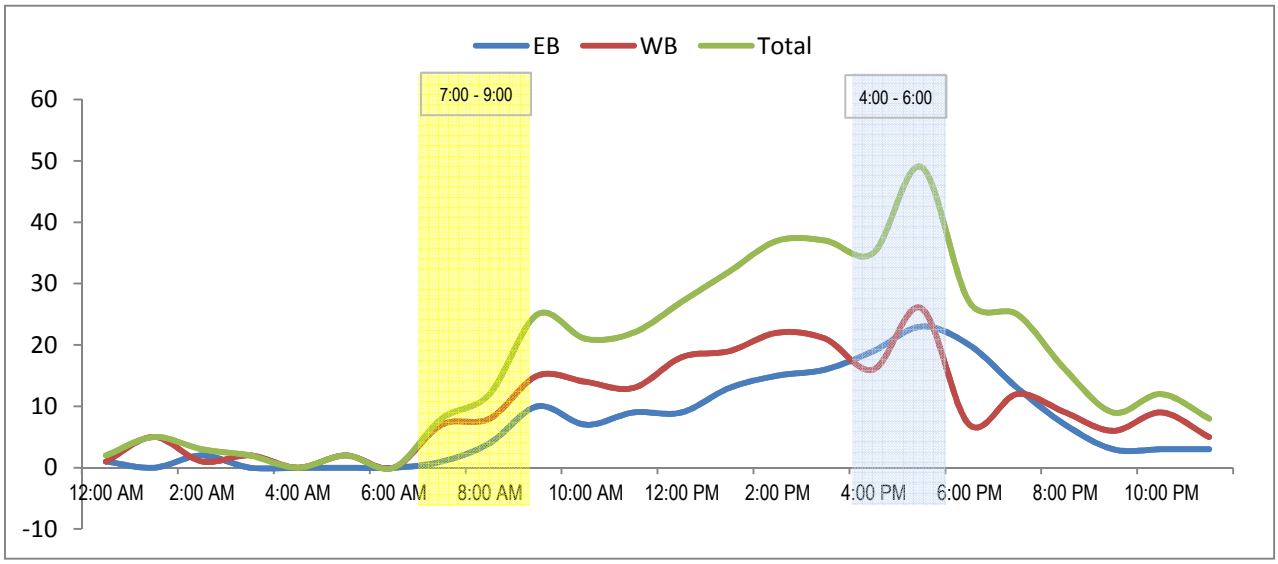
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*416*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	1	2
1:00 AM - 2:00 AM	0	5	5
2:00 AM - 3:00 AM	2	1	3
3:00 AM - 4:00 AM	0	2	2
4:00 AM - 5:00 AM	0	0	0
5:00 AM - 6:00 AM	0	2	2
6:00 AM - 7:00 AM	0	0	0
7:00 AM - 8:00 AM	1	7	8
8:00 AM - 9:00 AM	4	8	12
9:00 AM - 10:00 AM	10	15	25
10:00 AM - 11:00 AM	7	14	21
11:00 AM - 12:00 PM	9	13	22
Total	**34**	**68**	**102**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	9	18	27
1:00 PM - 2:00 PM	13	19	32
2:00 PM - 3:00 PM	15	22	37
3:00 PM - 4:00 PM	16	21	37
4:00 PM - 5:00 PM	19	16	35
5:00 PM - 6:00 PM	23	26	49
6:00 PM - 7:00 PM	20	7	27
7:00 PM - 8:00 PM	13	12	25
8:00 PM - 9:00 PM	7	9	16
9:00 PM - 10:00 PM	3	6	9
10:00 PM - 11:00 PM	3	9	12
11:00 PM - 12:00 AM	3	5	8
Total	**144**	**170**	**314**

24-Hour	*EB*	*Volume*	*178*	*24-Hour*	*WB*	*Volume*	*238*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

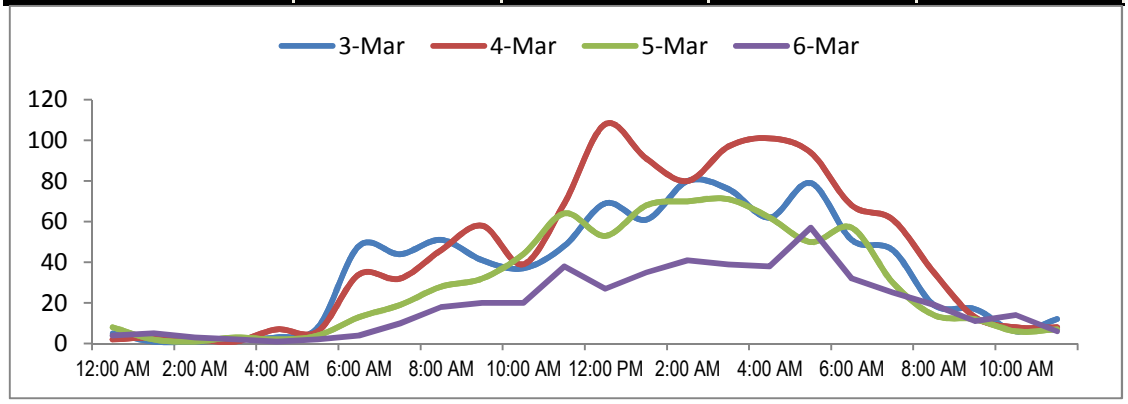
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 32. North Ave between Citrus St and Alford St
Orientation: *East-West*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***780***
Highest Daily Traffic	***1,063***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	5	2	8	4
1:00 AM - 2:00 AM	1	3	2	5
2:00 AM - 3:00 AM	1	2	1	3
3:00 AM - 4:00 AM	2	1	3	2
4:00 AM - 5:00 AM	3	7	2	1
5:00 AM - 6:00 AM	8	6	4	2
6:00 AM - 7:00 AM	48	34	13	4
7:00 AM - 8:00 AM	44	32	19	10
8:00 AM - 9:00 AM	51	46	28	18
9:00 AM - 10:00 AM	41	58	32	20
10:00 AM - 11:00 AM	37	39	44	20
11:00 AM - 12:00 PM	48	69	64	38
12:00 PM - 1:00 PM	69	108	53	27
1:00 PM - 2:00 PM	61	91	68	35
2:00 PM - 3:00 PM	80	80	70	41
3:00 PM - 4:00 PM	76	97	71	39
4:00 PM - 5:00 PM	62	101	62	38
5:00 PM - 6:00 PM	79	94	50	57
6:00 PM - 7:00 PM	51	68	57	32
7:00 PM - 8:00 PM	46	61	30	25
8:00 PM - 9:00 PM	19	35	14	19
9:00 PM - 10:00 PM	17	13	12	11
10:00 PM - 11:00 PM	6	8	6	14
11:00 PM - 12:00 AM	12	8	7	6
Total	**867**	**1,063**	**720**	**471**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 32. North Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

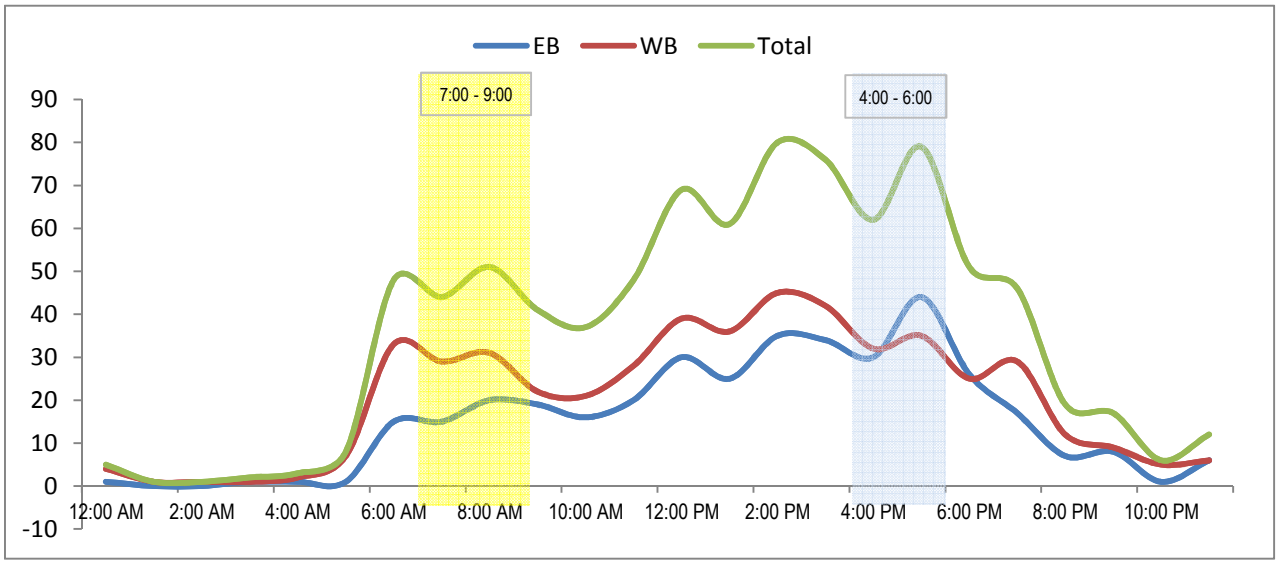
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*867*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	4	5
1:00 AM - 2:00 AM	0	1	1
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	1	1	2
4:00 AM - 5:00 AM	1	2	3
5:00 AM - 6:00 AM	1	7	8
6:00 AM - 7:00 AM	15	33	48
7:00 AM - 8:00 AM	15	29	44
8:00 AM - 9:00 AM	20	31	51
9:00 AM - 10:00 AM	19	22	41
10:00 AM - 11:00 AM	16	21	37
11:00 AM - 12:00 PM	20	28	48
Total	**109**	**180**	**289**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	30	39	69
1:00 PM - 2:00 PM	25	36	61
2:00 PM - 3:00 PM	35	45	80
3:00 PM - 4:00 PM	34	42	76
4:00 PM - 5:00 PM	30	32	62
5:00 PM - 6:00 PM	44	35	79
6:00 PM - 7:00 PM	26	25	51
7:00 PM - 8:00 PM	17	29	46
8:00 PM - 9:00 PM	7	12	19
9:00 PM - 10:00 PM	8	9	17
10:00 PM - 11:00 PM	1	5	6
11:00 PM - 12:00 AM	6	6	12
Total	**263**	**315**	**578**

24-Hour	*EB*	*Volume*	*372*	*24-Hour*	*WB*	*Volume*	*495*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 32. North Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

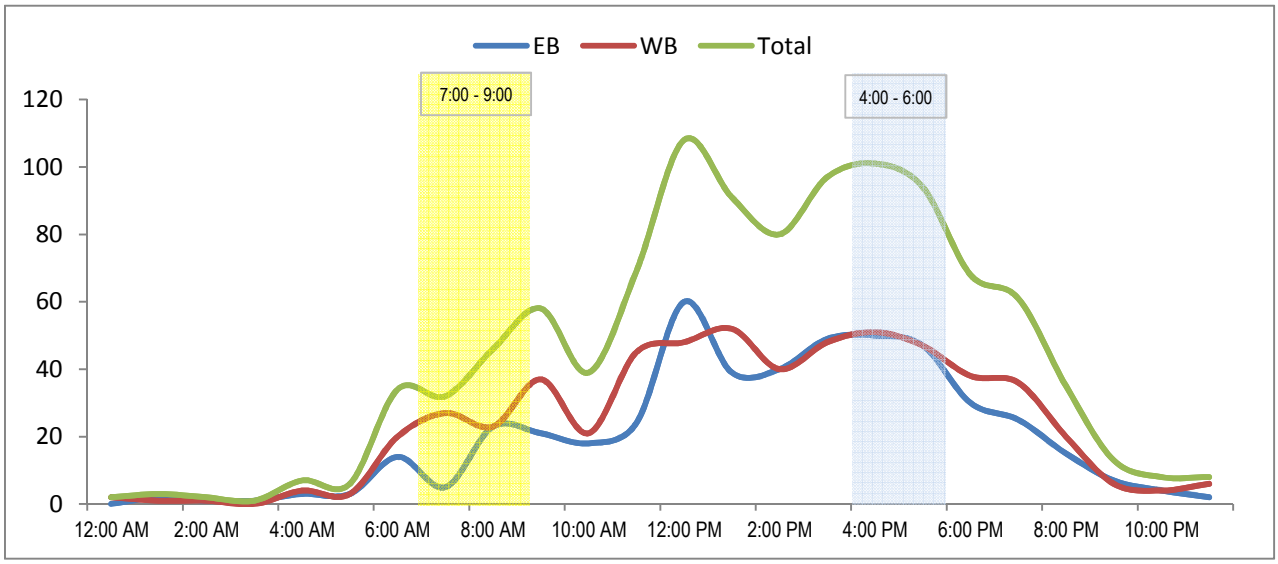
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*1,063*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	0	2	2
1:00 AM - 2:00 AM	2	1	3
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	1	0	1
4:00 AM - 5:00 AM	3	4	7
5:00 AM - 6:00 AM	3	3	6
6:00 AM - 7:00 AM	14	20	34
7:00 AM - 8:00 AM	5	27	32
8:00 AM - 9:00 AM	23	23	46
9:00 AM - 10:00 AM	21	37	58
10:00 AM - 11:00 AM	18	21	39
11:00 AM - 12:00 PM	24	45	69
Total	**115**	**184**	**299**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	60	48	108
1:00 PM - 2:00 PM	39	52	91
2:00 PM - 3:00 PM	40	40	80
3:00 PM - 4:00 PM	49	48	97
4:00 PM - 5:00 PM	50	51	101
5:00 PM - 6:00 PM	47	47	94
6:00 PM - 7:00 PM	30	38	68
7:00 PM - 8:00 PM	25	36	61
8:00 PM - 9:00 PM	15	20	35
9:00 PM - 10:00 PM	7	6	13
10:00 PM - 11:00 PM	4	4	8
11:00 PM - 12:00 AM	2	6	8
Total	**368**	**396**	**764**

24-Hour	*EB*	*Volume*	*483*	*24-Hour*	*WB*	*Volume*	*580*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 32. North Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

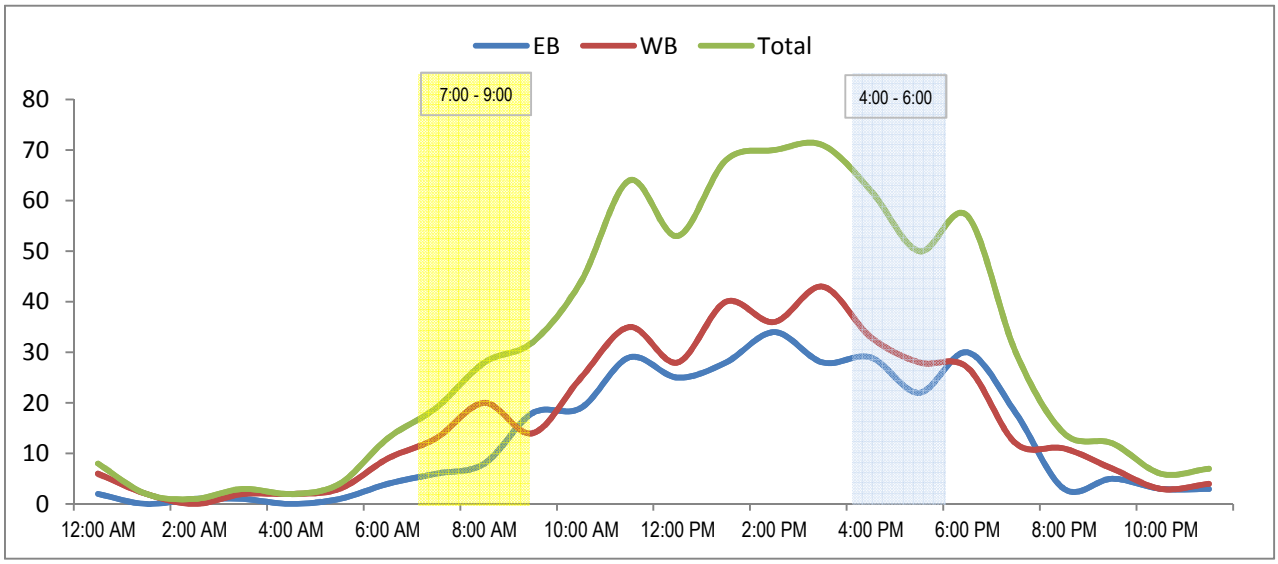
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*720*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	6	8
1:00 AM - 2:00 AM	0	2	2
2:00 AM - 3:00 AM	1	0	1
3:00 AM - 4:00 AM	1	2	3
4:00 AM - 5:00 AM	0	2	2
5:00 AM - 6:00 AM	1	3	4
6:00 AM - 7:00 AM	4	9	13
7:00 AM - 8:00 AM	6	13	19
8:00 AM - 9:00 AM	8	20	28
9:00 AM - 10:00 AM	18	14	32
10:00 AM - 11:00 AM	19	25	44
11:00 AM - 12:00 PM	29	35	64
Total	**89**	**131**	**220**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	25	28	53
1:00 PM - 2:00 PM	28	40	68
2:00 PM - 3:00 PM	34	36	70
3:00 PM - 4:00 PM	28	43	71
4:00 PM - 5:00 PM	29	33	62
5:00 PM - 6:00 PM	22	28	50
6:00 PM - 7:00 PM	30	27	57
7:00 PM - 8:00 PM	18	12	30
8:00 PM - 9:00 PM	3	11	14
9:00 PM - 10:00 PM	5	7	12
10:00 PM - 11:00 PM	3	3	6
11:00 PM - 12:00 AM	3	4	7
Total	**228**	**272**	**500**

24-Hour	*EB*	*Volume*	*317*	*24-Hour*	*WB*	*Volume*	*403*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 32. North Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

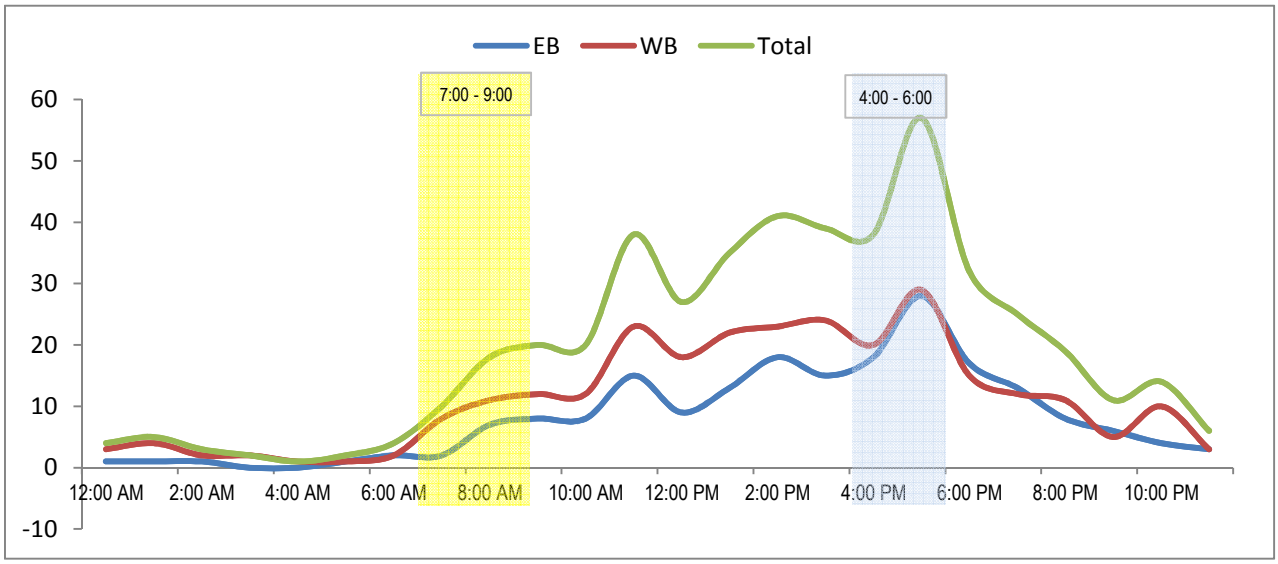
AVC Proj. No: *16-0493*

24 Hour Segment Volume ***471***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	3	4
1:00 AM - 2:00 AM	1	4	5
2:00 AM - 3:00 AM	1	2	3
3:00 AM - 4:00 AM	0	2	2
4:00 AM - 5:00 AM	0	1	1
5:00 AM - 6:00 AM	1	1	2
6:00 AM - 7:00 AM	2	2	4
7:00 AM - 8:00 AM	2	8	10
8:00 AM - 9:00 AM	7	11	18
9:00 AM - 10:00 AM	8	12	20
10:00 AM - 11:00 AM	8	12	20
11:00 AM - 12:00 PM	15	23	38
Total	**46**	**81**	**127**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	9	18	27
1:00 PM - 2:00 PM	13	22	35
2:00 PM - 3:00 PM	18	23	41
3:00 PM - 4:00 PM	15	24	39
4:00 PM - 5:00 PM	18	20	38
5:00 PM - 6:00 PM	28	29	57
6:00 PM - 7:00 PM	17	15	32
7:00 PM - 8:00 PM	13	12	25
8:00 PM - 9:00 PM	8	11	19
9:00 PM - 10:00 PM	6	5	11
10:00 PM - 11:00 PM	4	10	14
11:00 PM - 12:00 AM	3	3	6
Total	**152**	**192**	**344**

24-Hour EB Volume 198 ***24-Hour WB Volume 273***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

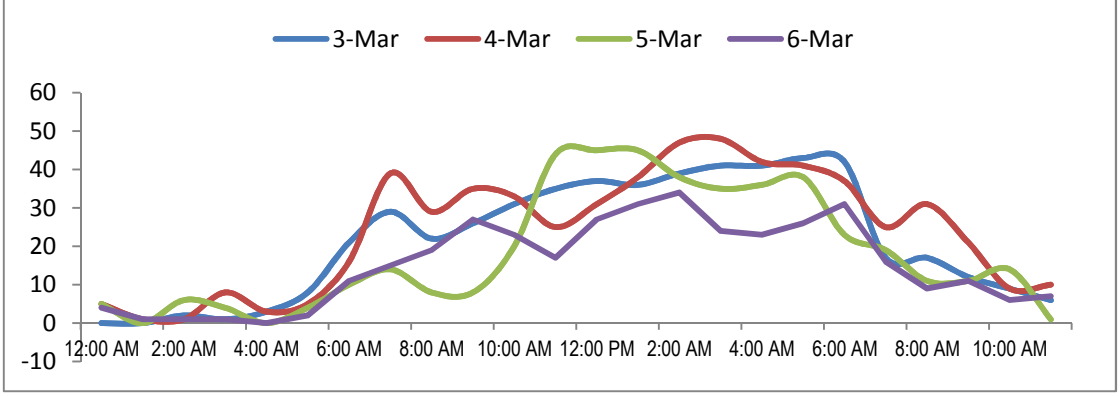
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 33. Pacific Ave between Citrus St and Alford St
Orientation: *East-West*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***476***
Highest Daily Traffic	***580***

Time			Hourly Volume			
			3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM	-	1:00 AM	0	5	5	4
1:00 AM	-	2:00 AM	0	1	0	1
2:00 AM	-	3:00 AM	2	1	6	1
3:00 AM	-	4:00 AM	1	8	4	1
4:00 AM	-	5:00 AM	3	3	0	0
5:00 AM	-	6:00 AM	8	5	4	2
6:00 AM	-	7:00 AM	21	16	10	11
7:00 AM	-	8:00 AM	29	39	14	15
8:00 AM	-	9:00 AM	22	29	8	19
9:00 AM	-	10:00 AM	26	35	8	27
10:00 AM	-	11:00 AM	31	33	20	23
11:00 AM	-	12:00 PM	35	25	44	17
12:00 PM	-	1:00 PM	37	31	45	27
1:00 PM	-	2:00 PM	36	38	45	31
2:00 PM	-	3:00 PM	39	47	38	34
3:00 PM	-	4:00 PM	41	48	35	24
4:00 PM	-	5:00 PM	41	42	36	23
5:00 PM	-	6:00 PM	43	41	38	26
6:00 PM	-	7:00 PM	42	37	23	31
7:00 PM	-	8:00 PM	17	25	19	16
8:00 PM	-	9:00 PM	17	31	11	9
9:00 PM	-	10:00 PM	12	21	11	11
10:00 PM	-	11:00 PM	9	9	14	6
11:00 PM	-	12:00 AM	6	10	1	7
Total			**518**	**580**	**439**	**366**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 33. Pacific Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

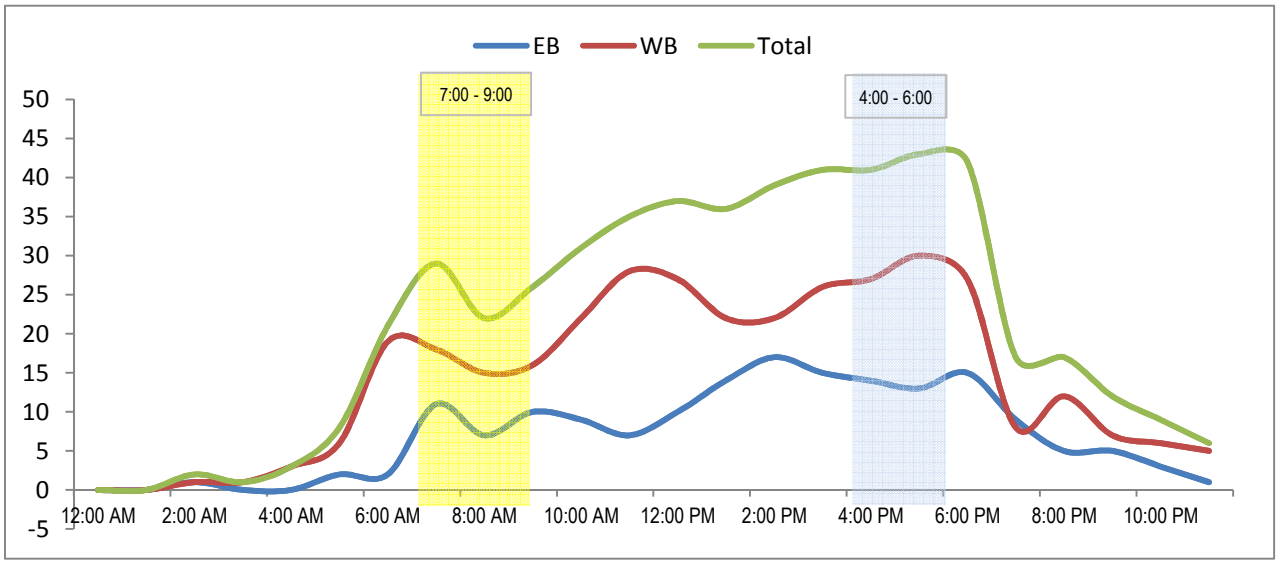
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*518*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	0	0	0
1:00 AM - 2:00 AM	0	0	0
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	0	1	1
4:00 AM - 5:00 AM	0	3	3
5:00 AM - 6:00 AM	2	6	8
6:00 AM - 7:00 AM	2	19	21
7:00 AM - 8:00 AM	11	18	29
8:00 AM - 9:00 AM	7	15	22
9:00 AM - 10:00 AM	10	16	26
10:00 AM - 11:00 AM	9	22	31
11:00 AM - 12:00 PM	7	28	35
Total	**49**	**129**	**178**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	10	27	37
1:00 PM - 2:00 PM	14	22	36
2:00 PM - 3:00 PM	17	22	39
3:00 PM - 4:00 PM	15	26	41
4:00 PM - 5:00 PM	14	27	41
5:00 PM - 6:00 PM	13	30	43
6:00 PM - 7:00 PM	15	27	42
7:00 PM - 8:00 PM	9	8	17
8:00 PM - 9:00 PM	5	12	17
9:00 PM - 10:00 PM	5	7	12
10:00 PM - 11:00 PM	3	6	9
11:00 PM - 12:00 AM	1	5	6
Total	**121**	**219**	**340**

24-Hour	*EB*	*Volume*	*170*	*24-Hour*	*WB*	*Volume*	*348*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 33. Pacific Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

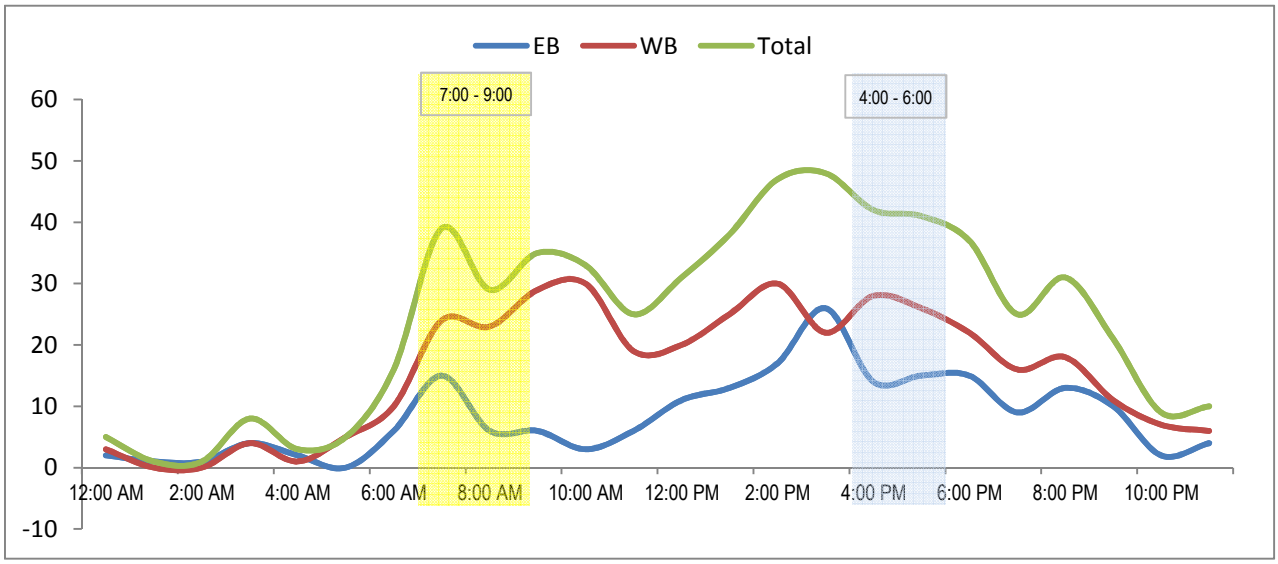
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*580*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	3	5
1:00 AM - 2:00 AM	1	0	1
2:00 AM - 3:00 AM	1	0	1
3:00 AM - 4:00 AM	4	4	8
4:00 AM - 5:00 AM	2	1	3
5:00 AM - 6:00 AM	0	5	5
6:00 AM - 7:00 AM	6	10	16
7:00 AM - 8:00 AM	15	24	39
8:00 AM - 9:00 AM	6	23	29
9:00 AM - 10:00 AM	6	29	35
10:00 AM - 11:00 AM	3	30	33
11:00 AM - 12:00 PM	6	19	25
Total	**52**	**148**	**200**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	11	20	31
1:00 PM - 2:00 PM	13	25	38
2:00 PM - 3:00 PM	17	30	47
3:00 PM - 4:00 PM	26	22	48
4:00 PM - 5:00 PM	14	28	42
5:00 PM - 6:00 PM	15	26	41
6:00 PM - 7:00 PM	15	22	37
7:00 PM - 8:00 PM	9	16	25
8:00 PM - 9:00 PM	13	18	31
9:00 PM - 10:00 PM	10	11	21
10:00 PM - 11:00 PM	2	7	9
11:00 PM - 12:00 AM	4	6	10
Total	**149**	**231**	**380**

24-Hour	*EB*	*Volume*	*201*	*24-Hour*	*WB*	*Volume*	*379*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 33. Pacific Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

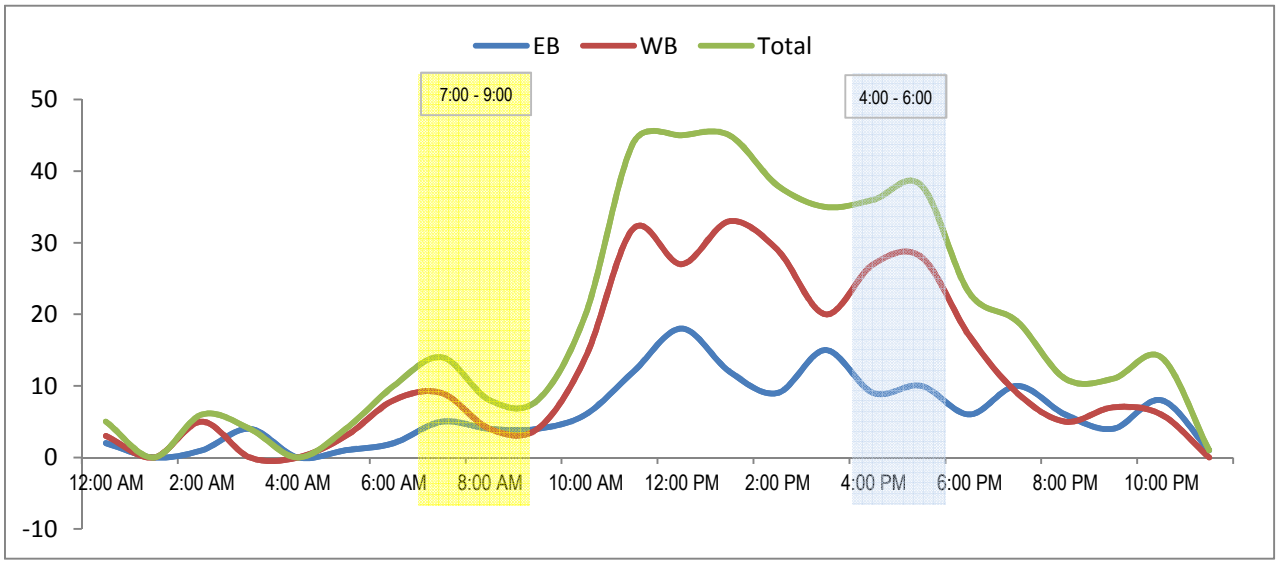
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***439***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	2	3	5
1:00 AM - 2:00 AM	0	0	0
2:00 AM - 3:00 AM	1	5	6
3:00 AM - 4:00 AM	4	0	4
4:00 AM - 5:00 AM	0	0	0
5:00 AM - 6:00 AM	1	3	4
6:00 AM - 7:00 AM	2	8	10
7:00 AM - 8:00 AM	5	9	14
8:00 AM - 9:00 AM	4	4	8
9:00 AM - 10:00 AM	4	4	8
10:00 AM - 11:00 AM	6	14	20
11:00 AM - 12:00 PM	12	32	44
Total	**41**	**82**	**123**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	18	27	45
1:00 PM - 2:00 PM	12	33	45
2:00 PM - 3:00 PM	9	29	38
3:00 PM - 4:00 PM	15	20	35
4:00 PM - 5:00 PM	9	27	36
5:00 PM - 6:00 PM	10	28	38
6:00 PM - 7:00 PM	6	17	23
7:00 PM - 8:00 PM	10	9	19
8:00 PM - 9:00 PM	6	5	11
9:00 PM - 10:00 PM	4	7	11
10:00 PM - 11:00 PM	8	6	14
11:00 PM - 12:00 AM	1	0	1
Total	**108**	**208**	**316**

24-Hour	***EB***	***Volume***	***149***	***24-Hour***	***WB***	***Volume***	***290***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 33. Pacific Ave between Citrus St and Alford St

Orientation: *East-West*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

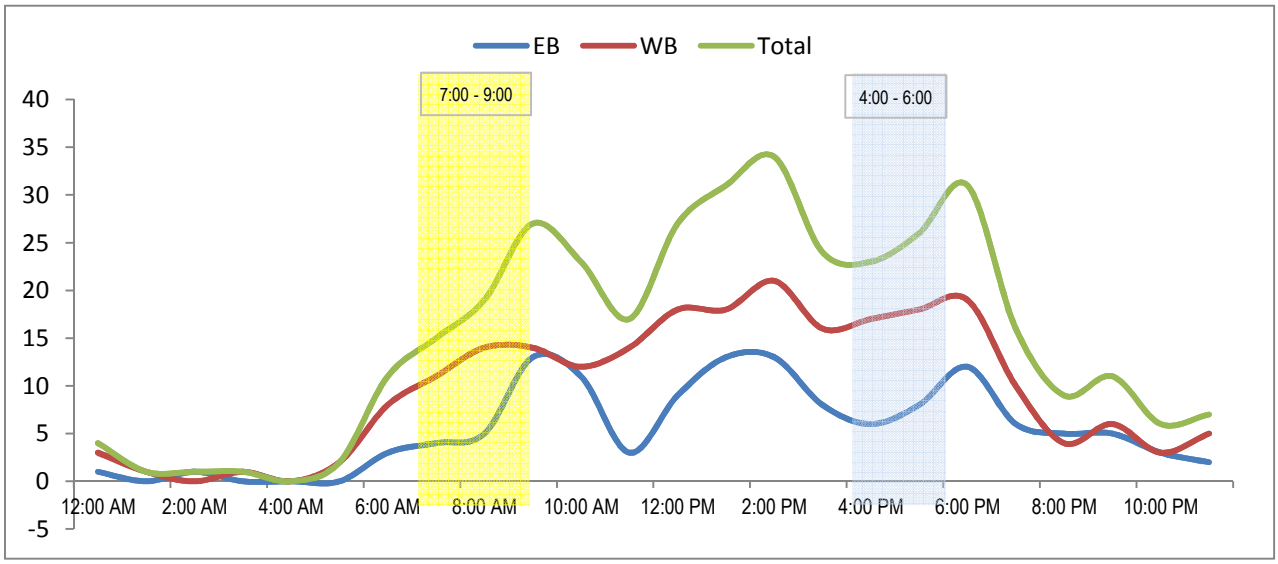
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*366*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	3	4
1:00 AM - 2:00 AM	0	1	1
2:00 AM - 3:00 AM	1	0	1
3:00 AM - 4:00 AM	0	1	1
4:00 AM - 5:00 AM	0	0	0
5:00 AM - 6:00 AM	0	2	2
6:00 AM - 7:00 AM	3	8	11
7:00 AM - 8:00 AM	4	11	15
8:00 AM - 9:00 AM	5	14	19
9:00 AM - 10:00 AM	13	14	27
10:00 AM - 11:00 AM	11	12	23
11:00 AM - 12:00 PM	3	14	17
Total	**41**	**80**	**121**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	9	18	27
1:00 PM - 2:00 PM	13	18	31
2:00 PM - 3:00 PM	13	21	34
3:00 PM - 4:00 PM	8	16	24
4:00 PM - 5:00 PM	6	17	23
5:00 PM - 6:00 PM	8	18	26
6:00 PM - 7:00 PM	12	19	31
7:00 PM - 8:00 PM	6	10	16
8:00 PM - 9:00 PM	5	4	9
9:00 PM - 10:00 PM	5	6	11
10:00 PM - 11:00 PM	3	3	6
11:00 PM - 12:00 AM	2	5	7
Total	**90**	**155**	**245**

24-Hour	*EB*	*Volume*	*131*	*24-Hour*	*WB*	*Volume*	*235*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

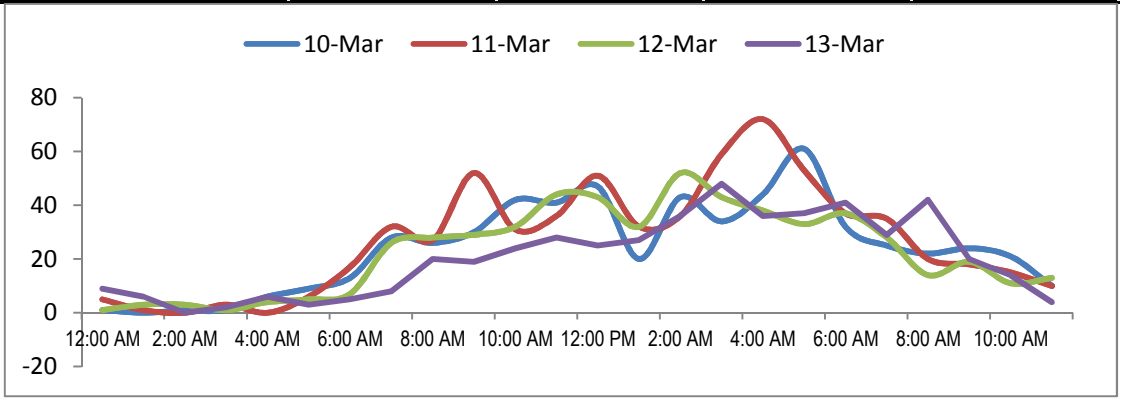
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 34. Pacific Ave between West St and New Jersey Ave
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***566***
Highest Daily Traffic	***648***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	1	5	1	9
1:00 AM - 2:00 AM	0	1	3	6
2:00 AM - 3:00 AM	1	0	3	0
3:00 AM - 4:00 AM	1	3	1	2
4:00 AM - 5:00 AM	6	0	4	6
5:00 AM - 6:00 AM	9	6	5	3
6:00 AM - 7:00 AM	13	17	7	5
7:00 AM - 8:00 AM	28	32	26	8
8:00 AM - 9:00 AM	26	27	28	20
9:00 AM - 10:00 AM	30	52	29	19
10:00 AM - 11:00 AM	42	31	32	24
11:00 AM - 12:00 PM	41	36	44	28
12:00 PM - 1:00 PM	47	51	43	25
1:00 PM - 2:00 PM	20	32	32	27
2:00 PM - 3:00 PM	43	36	52	36
3:00 PM - 4:00 PM	34	59	43	48
4:00 PM - 5:00 PM	44	72	38	36
5:00 PM - 6:00 PM	61	53	33	37
6:00 PM - 7:00 PM	32	37	37	41
7:00 PM - 8:00 PM	25	35	28	29
8:00 PM - 9:00 PM	22	20	14	42
9:00 PM - 10:00 PM	24	18	19	20
10:00 PM - 11:00 PM	21	15	11	14
11:00 PM - 12:00 AM	10	10	13	4
Total	**581**	**648**	**546**	**489**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 34. Pacific Ave between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

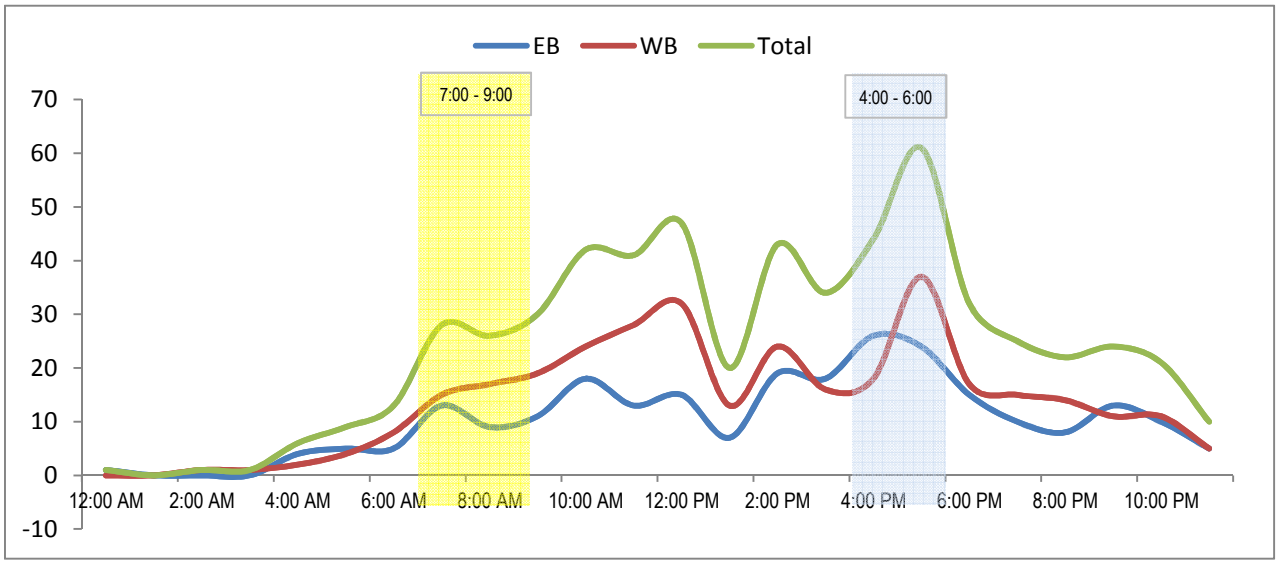
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*581*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	0	1
1:00 AM - 2:00 AM	0	0	0
2:00 AM - 3:00 AM	0	1	1
3:00 AM - 4:00 AM	0	1	1
4:00 AM - 5:00 AM	4	2	6
5:00 AM - 6:00 AM	5	4	9
6:00 AM - 7:00 AM	5	8	13
7:00 AM - 8:00 AM	13	15	28
8:00 AM - 9:00 AM	9	17	26
9:00 AM - 10:00 AM	11	19	30
10:00 AM - 11:00 AM	18	24	42
11:00 AM - 12:00 PM	13	28	41
Total	**79**	**119**	**198**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	15	32	47
1:00 PM - 2:00 PM	7	13	20
2:00 PM - 3:00 PM	19	24	43
3:00 PM - 4:00 PM	18	16	34
4:00 PM - 5:00 PM	26	18	44
5:00 PM - 6:00 PM	24	37	61
6:00 PM - 7:00 PM	15	17	32
7:00 PM - 8:00 PM	10	15	25
8:00 PM - 9:00 PM	8	14	22
9:00 PM - 10:00 PM	13	11	24
10:00 PM - 11:00 PM	10	11	21
11:00 PM - 12:00 AM	5	5	10
Total	**170**	**213**	**383**

24-Hour	*EB*	*Volume*	*249*	*24-Hour*	*WB*	*Volume*	*332*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 34. Pacific Ave between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

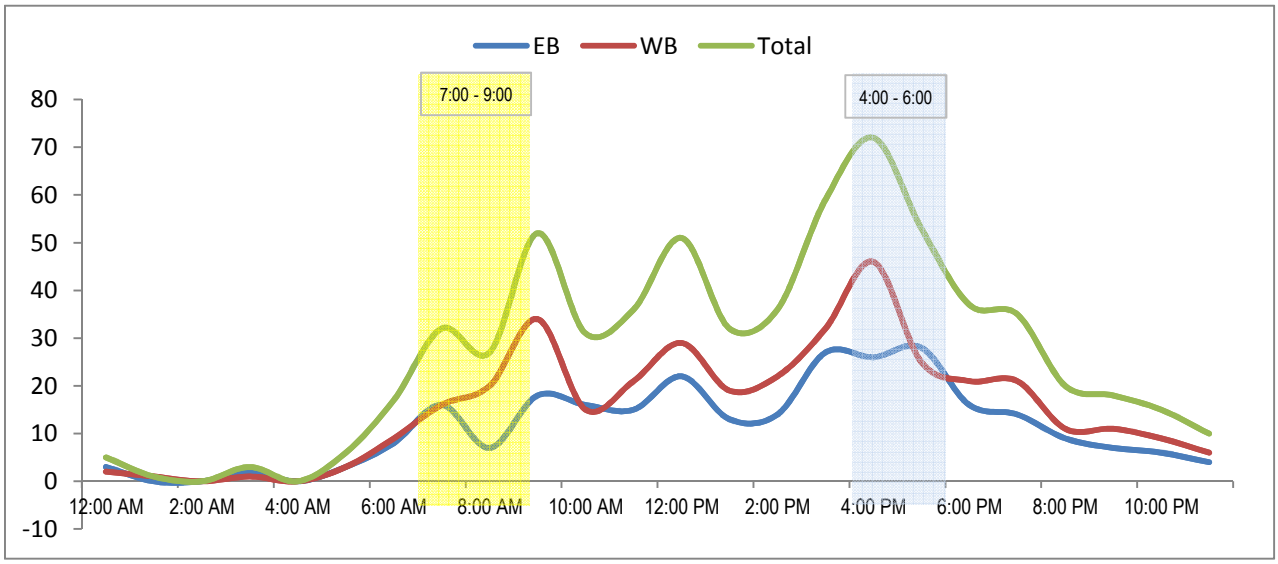
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*648*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	3	2	5
1:00 AM - 2:00 AM	0	1	1
2:00 AM - 3:00 AM	0	0	0
3:00 AM - 4:00 AM	2	1	3
4:00 AM - 5:00 AM	0	0	0
5:00 AM - 6:00 AM	3	3	6
6:00 AM - 7:00 AM	8	9	17
7:00 AM - 8:00 AM	16	16	32
8:00 AM - 9:00 AM	7	20	27
9:00 AM - 10:00 AM	18	34	52
10:00 AM - 11:00 AM	16	15	31
11:00 AM - 12:00 PM	15	21	36
Total	**88**	**122**	**210**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	22	29	51
1:00 PM - 2:00 PM	13	19	32
2:00 PM - 3:00 PM	14	22	36
3:00 PM - 4:00 PM	27	32	59
4:00 PM - 5:00 PM	26	46	72
5:00 PM - 6:00 PM	28	25	53
6:00 PM - 7:00 PM	16	21	37
7:00 PM - 8:00 PM	14	21	35
8:00 PM - 9:00 PM	9	11	20
9:00 PM - 10:00 PM	7	11	18
10:00 PM - 11:00 PM	6	9	15
11:00 PM - 12:00 AM	4	6	10
Total	**186**	**252**	**438**

24-Hour	*EB*	*Volume*	*274*	*24-Hour*	*WB*	*Volume*	*374*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 34. Pacific Ave between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

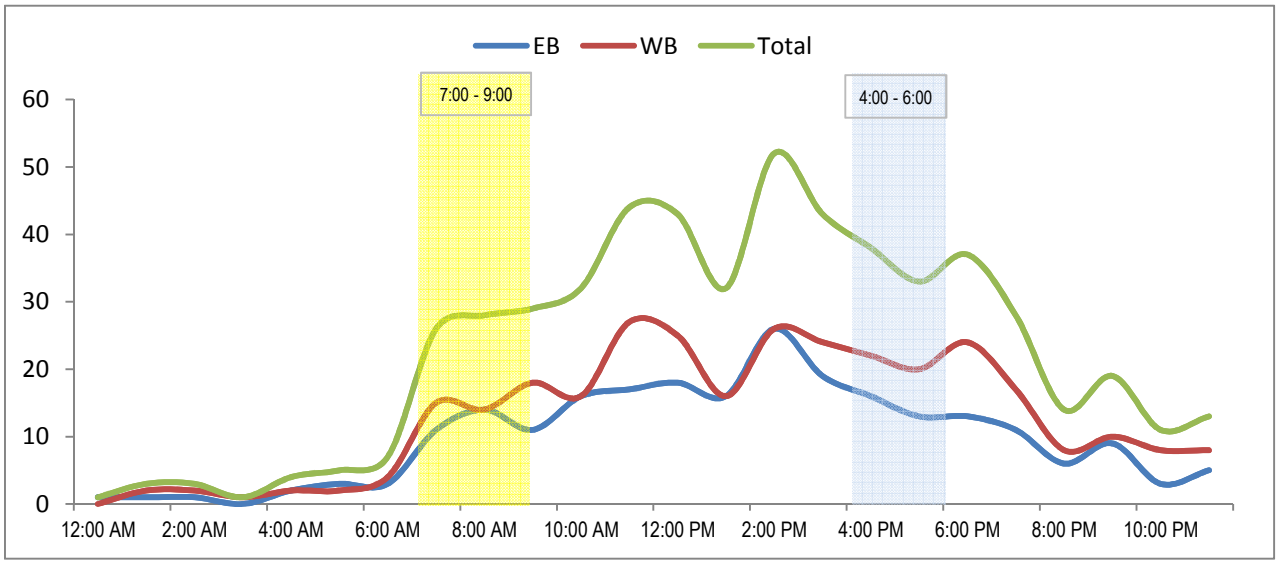
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*546*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	1	0	1
1:00 AM - 2:00 AM	1	2	3
2:00 AM - 3:00 AM	1	2	3
3:00 AM - 4:00 AM	0	1	1
4:00 AM - 5:00 AM	2	2	4
5:00 AM - 6:00 AM	3	2	5
6:00 AM - 7:00 AM	3	4	7
7:00 AM - 8:00 AM	11	15	26
8:00 AM - 9:00 AM	14	14	28
9:00 AM - 10:00 AM	11	18	29
10:00 AM - 11:00 AM	16	16	32
11:00 AM - 12:00 PM	17	27	44
Total	**80**	**103**	**183**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	18	25	43
1:00 PM - 2:00 PM	16	16	32
2:00 PM - 3:00 PM	26	26	52
3:00 PM - 4:00 PM	19	24	43
4:00 PM - 5:00 PM	16	22	38
5:00 PM - 6:00 PM	13	20	33
6:00 PM - 7:00 PM	13	24	37
7:00 PM - 8:00 PM	11	17	28
8:00 PM - 9:00 PM	6	8	14
9:00 PM - 10:00 PM	9	10	19
10:00 PM - 11:00 PM	3	8	11
11:00 PM - 12:00 AM	5	8	13
Total	**155**	**208**	**363**

24-Hour	*EB*	*Volume*	*235*	*24-Hour*	*WB*	*Volume*	*311*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 34. Pacific Ave between West St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

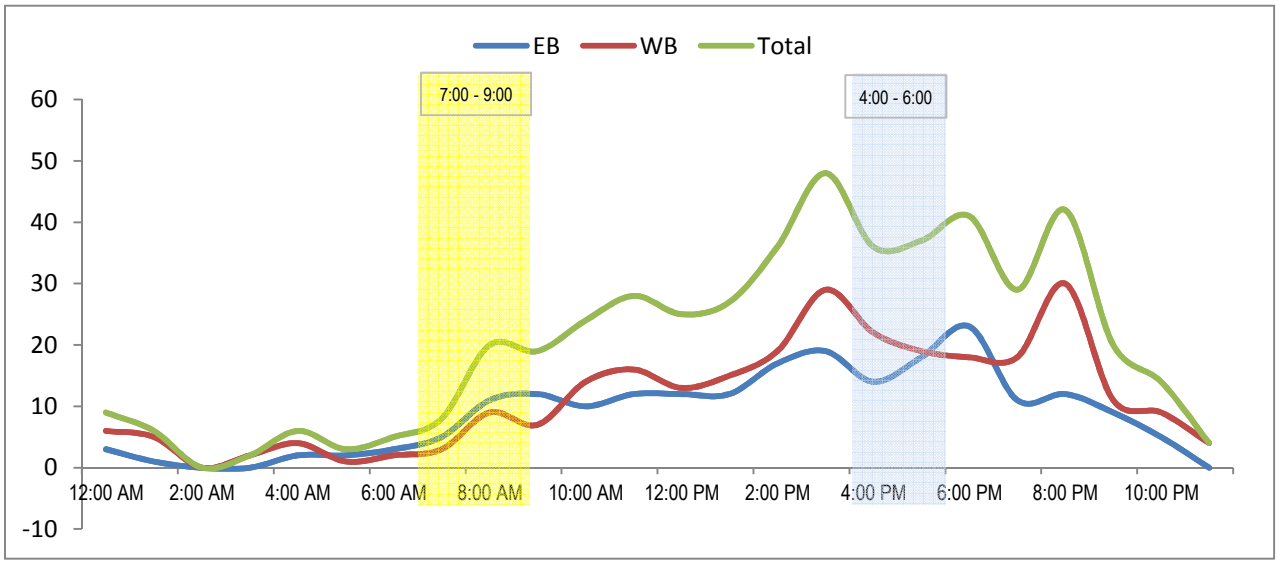
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*489*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	3	6	9
1:00 AM - 2:00 AM	1	5	6
2:00 AM - 3:00 AM	0	0	0
3:00 AM - 4:00 AM	0	2	2
4:00 AM - 5:00 AM	2	4	6
5:00 AM - 6:00 AM	2	1	3
6:00 AM - 7:00 AM	3	2	5
7:00 AM - 8:00 AM	5	3	8
8:00 AM - 9:00 AM	11	9	20
9:00 AM - 10:00 AM	12	7	19
10:00 AM - 11:00 AM	10	14	24
11:00 AM - 12:00 PM	12	16	28
Total	**61**	**69**	**130**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	12	13	25
1:00 PM - 2:00 PM	12	15	27
2:00 PM - 3:00 PM	17	19	36
3:00 PM - 4:00 PM	19	29	48
4:00 PM - 5:00 PM	14	22	36
5:00 PM - 6:00 PM	18	19	37
6:00 PM - 7:00 PM	23	18	41
7:00 PM - 8:00 PM	11	18	29
8:00 PM - 9:00 PM	12	30	42
9:00 PM - 10:00 PM	9	11	20
10:00 PM - 11:00 PM	5	9	14
11:00 PM - 12:00 AM	0	4	4
Total	**152**	**207**	**359**

24-Hour	*EB*	*Volume*	*213*	*24-Hour*	*WB*	*Volume*	*276*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

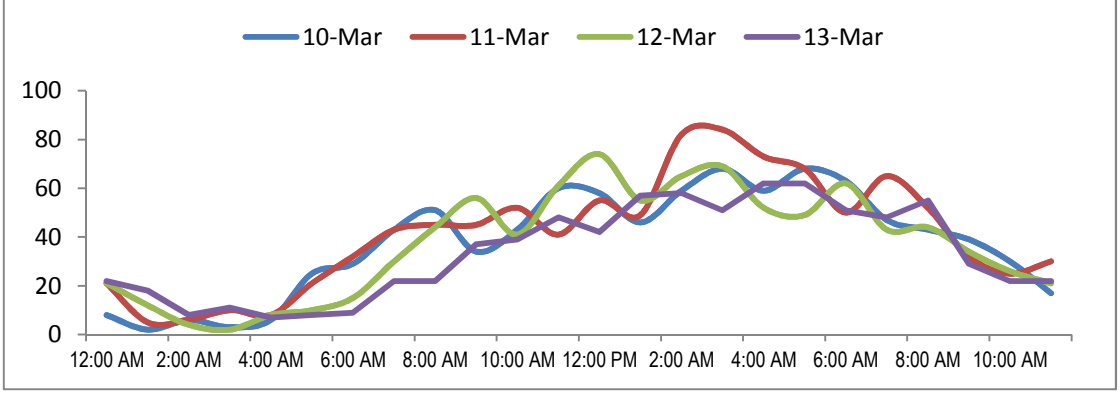
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 35. Pacific Ave between New Jersey Ave and Buena Vista Ave
Orientation: *East-West*
Day 1 *Thursday, March 10, 2016*
Day 2 *Friday, March 11, 2016*
Day 3 *Saturday, March 12, 2016*
Day 4 *Sunday, March 13, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***902***
Highest Daily Traffic	***994***

Time	Hourly Volume			
	10-Mar	11-Mar	12-Mar	13-Mar
12:00 AM - 1:00 AM	8	21	21	22
1:00 AM - 2:00 AM	2	5	12	18
2:00 AM - 3:00 AM	6	6	4	8
3:00 AM - 4:00 AM	3	10	2	11
4:00 AM - 5:00 AM	6	8	8	7
5:00 AM - 6:00 AM	25	21	10	8
6:00 AM - 7:00 AM	29	32	15	9
7:00 AM - 8:00 AM	43	43	30	22
8:00 AM - 9:00 AM	51	45	44	22
9:00 AM - 10:00 AM	34	45	56	37
10:00 AM - 11:00 AM	43	52	41	39
11:00 AM - 12:00 PM	60	41	61	48
12:00 PM - 1:00 PM	58	55	74	42
1:00 PM - 2:00 PM	46	49	55	57
2:00 PM - 3:00 PM	59	82	65	58
3:00 PM - 4:00 PM	68	84	69	51
4:00 PM - 5:00 PM	59	73	52	62
5:00 PM - 6:00 PM	68	68	49	62
6:00 PM - 7:00 PM	63	50	62	51
7:00 PM - 8:00 PM	47	65	43	48
8:00 PM - 9:00 PM	43	52	44	55
9:00 PM - 10:00 PM	39	32	34	29
10:00 PM - 11:00 PM	30	25	26	22
11:00 PM - 12:00 AM	17	30	21	22
Total	**907**	**994**	**898**	**810**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 35. Pacific Ave between New Jersey Ave and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Thursday, March 10, 2016*

Analysts: *DASH*

Weather: *Sunny*

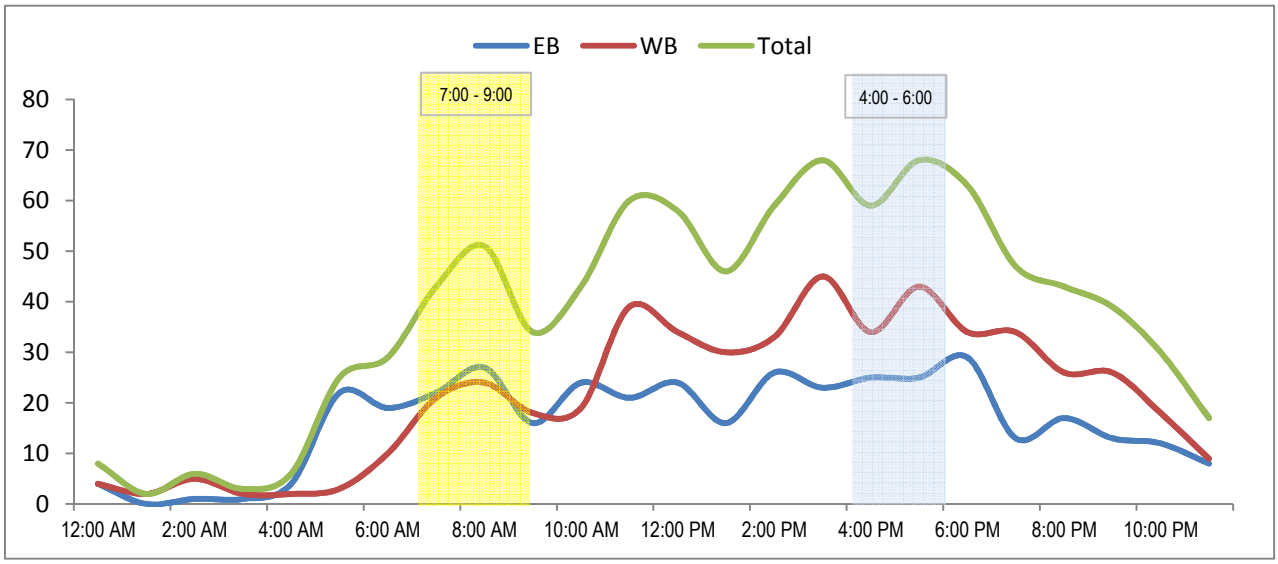
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*907*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	4	4	8
1:00 AM - 2:00 AM	0	2	2
2:00 AM - 3:00 AM	1	5	6
3:00 AM - 4:00 AM	1	2	3
4:00 AM - 5:00 AM	4	2	6
5:00 AM - 6:00 AM	22	3	25
6:00 AM - 7:00 AM	19	10	29
7:00 AM - 8:00 AM	22	21	43
8:00 AM - 9:00 AM	27	24	51
9:00 AM - 10:00 AM	16	18	34
10:00 AM - 11:00 AM	24	19	43
11:00 AM - 12:00 PM	21	39	60
Total	**161**	**149**	**310**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	24	34	58
1:00 PM - 2:00 PM	16	30	46
2:00 PM - 3:00 PM	26	33	59
3:00 PM - 4:00 PM	23	45	68
4:00 PM - 5:00 PM	25	34	59
5:00 PM - 6:00 PM	25	43	68
6:00 PM - 7:00 PM	29	34	63
7:00 PM - 8:00 PM	13	34	47
8:00 PM - 9:00 PM	17	26	43
9:00 PM - 10:00 PM	13	26	39
10:00 PM - 11:00 PM	12	18	30
11:00 PM - 12:00 AM	8	9	17
Total	**231**	**366**	**597**

24-Hour	*EB*	*Volume*	*392*	*24-Hour*	*WB*	*Volume*	*515*



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 35. Pacific Ave between New Jersey Ave and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Friday, March 11, 2016*

Analysts: *DASH*

Weather: *Sunny*

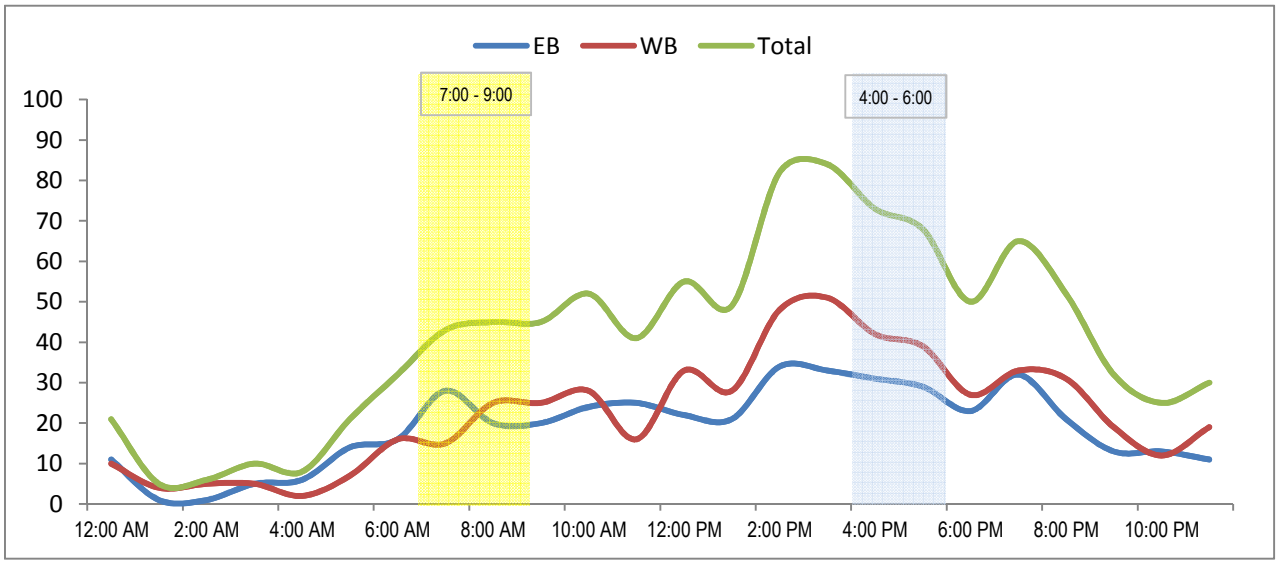
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*994*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	11	10	21
1:00 AM - 2:00 AM	1	4	5
2:00 AM - 3:00 AM	1	5	6
3:00 AM - 4:00 AM	5	5	10
4:00 AM - 5:00 AM	6	2	8
5:00 AM - 6:00 AM	14	7	21
6:00 AM - 7:00 AM	16	16	32
7:00 AM - 8:00 AM	28	15	43
8:00 AM - 9:00 AM	20	25	45
9:00 AM - 10:00 AM	20	25	45
10:00 AM - 11:00 AM	24	28	52
11:00 AM - 12:00 PM	25	16	41
Total	**171**	**158**	**329**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	22	33	55
1:00 PM - 2:00 PM	21	28	49
2:00 PM - 3:00 PM	34	48	82
3:00 PM - 4:00 PM	33	51	84
4:00 PM - 5:00 PM	31	42	73
5:00 PM - 6:00 PM	29	39	68
6:00 PM - 7:00 PM	23	27	50
7:00 PM - 8:00 PM	32	33	65
8:00 PM - 9:00 PM	21	31	52
9:00 PM - 10:00 PM	13	19	32
10:00 PM - 11:00 PM	13	12	25
11:00 PM - 12:00 AM	11	19	30
Total	**283**	**382**	**665**

24-Hour	*EB*	*Volume*	*454*	*24-Hour*	*WB*	*Volume*	*540*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 35. Pacific Ave between New Jersey Ave and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Saturday, March 12, 2016*

Analysts: *DASH*

Weather: *Sunny*

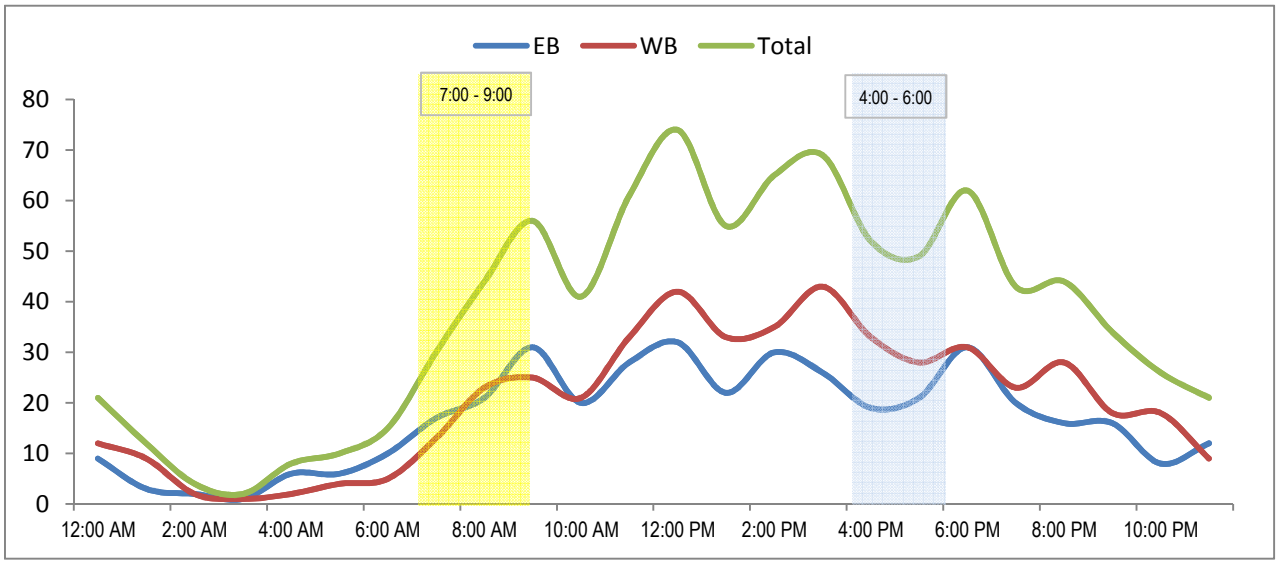
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*898*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	9	12	21
1:00 AM - 2:00 AM	3	9	12
2:00 AM - 3:00 AM	2	2	4
3:00 AM - 4:00 AM	1	1	2
4:00 AM - 5:00 AM	6	2	8
5:00 AM - 6:00 AM	6	4	10
6:00 AM - 7:00 AM	10	5	15
7:00 AM - 8:00 AM	17	13	30
8:00 AM - 9:00 AM	21	23	44
9:00 AM - 10:00 AM	31	25	56
10:00 AM - 11:00 AM	20	21	41
11:00 AM - 12:00 PM	28	33	61
Total	**154**	**150**	**304**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	32	42	74
1:00 PM - 2:00 PM	22	33	55
2:00 PM - 3:00 PM	30	35	65
3:00 PM - 4:00 PM	26	43	69
4:00 PM - 5:00 PM	19	33	52
5:00 PM - 6:00 PM	21	28	49
6:00 PM - 7:00 PM	31	31	62
7:00 PM - 8:00 PM	20	23	43
8:00 PM - 9:00 PM	16	28	44
9:00 PM - 10:00 PM	16	18	34
10:00 PM - 11:00 PM	8	18	26
11:00 PM - 12:00 AM	12	9	21
Total	**253**	**341**	**594**

24-Hour	*EB*	*Volume*	*407*	*24-Hour*	*WB*	*Volume*	*491*



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 35. Pacific Ave between New Jersey Ave and Buena Vista Ave

Orientation: *East-West*

Date of Count: *Sunday, March 13, 2016*

Analysts: *DASH*

Weather: *Sunny*

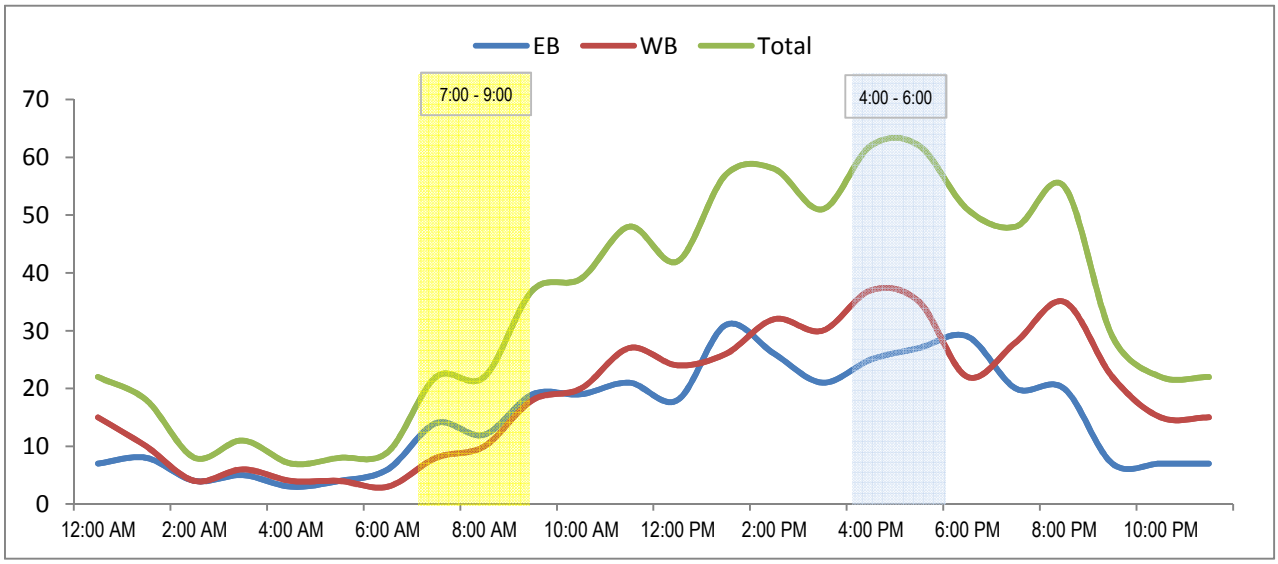
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*810*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	7	15	22
1:00 AM - 2:00 AM	8	10	18
2:00 AM - 3:00 AM	4	4	8
3:00 AM - 4:00 AM	5	6	11
4:00 AM - 5:00 AM	3	4	7
5:00 AM - 6:00 AM	4	4	8
6:00 AM - 7:00 AM	6	3	9
7:00 AM - 8:00 AM	14	8	22
8:00 AM - 9:00 AM	12	10	22
9:00 AM - 10:00 AM	19	18	37
10:00 AM - 11:00 AM	19	20	39
11:00 AM - 12:00 PM	21	27	48
Total	**122**	**129**	**251**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	18	24	42
1:00 PM - 2:00 PM	31	26	57
2:00 PM - 3:00 PM	26	32	58
3:00 PM - 4:00 PM	21	30	51
4:00 PM - 5:00 PM	25	37	62
5:00 PM - 6:00 PM	27	35	62
6:00 PM - 7:00 PM	29	22	51
7:00 PM - 8:00 PM	20	28	48
8:00 PM - 9:00 PM	20	35	55
9:00 PM - 10:00 PM	7	22	29
10:00 PM - 11:00 PM	7	15	22
11:00 PM - 12:00 AM	7	15	22
Total	**238**	**321**	**559**

24-Hour	*EB*	*Volume*	*360*	*24-Hour*	*WB*	*Volume*	*450*



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

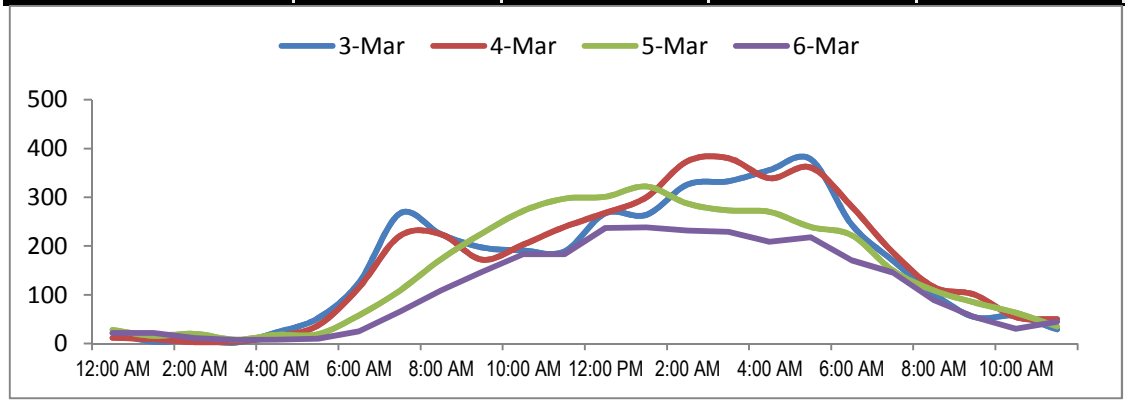
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 36. Central Ave between Citrus St and New Jersey Ave
Orientation: *East-West*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***3,560***
Highest Daily Traffic	***4,064***

Time			Hourly Volume			
			3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM	-	1:00 AM	22	12	28	22
1:00 AM	-	2:00 AM	4	9	16	22
2:00 AM	-	3:00 AM	8	3	20	11
3:00 AM	-	4:00 AM	2	4	8	7
4:00 AM	-	5:00 AM	23	15	18	8
5:00 AM	-	6:00 AM	52	37	19	10
6:00 AM	-	7:00 AM	125	115	58	25
7:00 AM	-	8:00 AM	267	221	109	66
8:00 AM	-	9:00 AM	224	224	173	109
9:00 AM	-	10:00 AM	197	172	226	147
10:00 AM	-	11:00 AM	191	203	272	183
11:00 AM	-	12:00 PM	189	239	297	183
12:00 PM	-	1:00 PM	267	268	301	237
1:00 PM	-	2:00 PM	264	300	322	238
2:00 PM	-	3:00 PM	326	374	287	232
3:00 PM	-	4:00 PM	333	380	273	229
4:00 PM	-	5:00 PM	356	339	270	209
5:00 PM	-	6:00 PM	378	361	239	218
6:00 PM	-	7:00 PM	244	281	222	171
7:00 PM	-	8:00 PM	170	187	150	146
8:00 PM	-	9:00 PM	102	116	109	89
9:00 PM	-	10:00 PM	54	100	84	54
10:00 PM	-	11:00 PM	57	54	63	30
11:00 PM	-	12:00 AM	29	50	35	45
Total			**3,884**	**4,064**	**3,599**	**2,691**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 36. Central Ave between Citrus St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

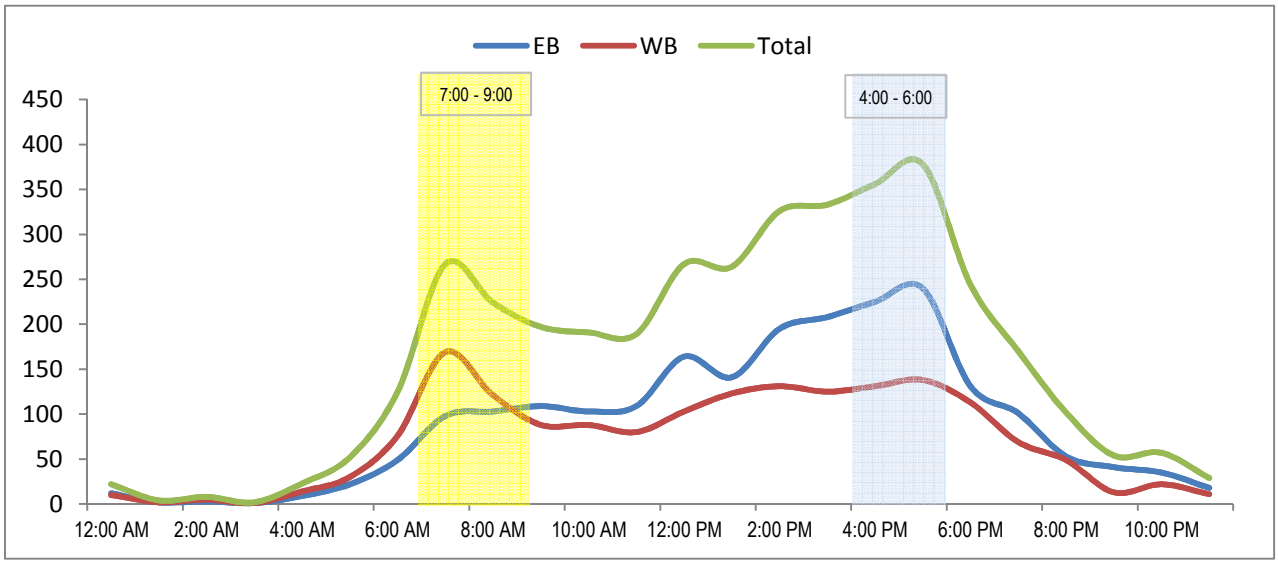
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***3,884***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	12	10	22
1:00 AM - 2:00 AM	2	2	4
2:00 AM - 3:00 AM	3	5	8
3:00 AM - 4:00 AM	1	1	2
4:00 AM - 5:00 AM	9	14	23
5:00 AM - 6:00 AM	22	30	52
6:00 AM - 7:00 AM	49	76	125
7:00 AM - 8:00 AM	98	169	267
8:00 AM - 9:00 AM	103	121	224
9:00 AM - 10:00 AM	109	88	197
10:00 AM - 11:00 AM	103	88	191
11:00 AM - 12:00 PM	109	80	189
Total	**620**	**684**	**1,304**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	164	103	267
1:00 PM - 2:00 PM	141	123	264
2:00 PM - 3:00 PM	195	131	326
3:00 PM - 4:00 PM	208	125	333
4:00 PM - 5:00 PM	225	131	356
5:00 PM - 6:00 PM	240	138	378
6:00 PM - 7:00 PM	131	113	244
7:00 PM - 8:00 PM	101	69	170
8:00 PM - 9:00 PM	53	49	102
9:00 PM - 10:00 PM	41	13	54
10:00 PM - 11:00 PM	35	22	57
11:00 PM - 12:00 AM	18	11	29
Total	**1,552**	**1,028**	**2,580**

24-Hour	***EB***	***Volume***	***2,172***	***24-Hour***	***WB***	***Volume***	***1,712***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 36. Central Ave between Citrus St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

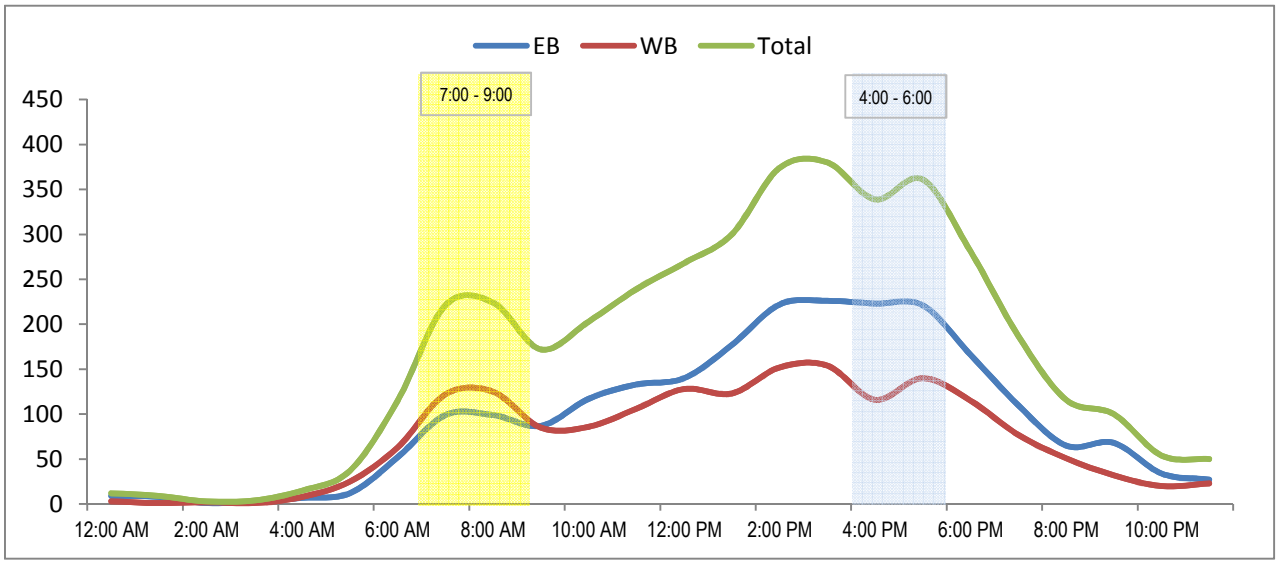
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*4,064*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	9	3	12
1:00 AM - 2:00 AM	8	1	9
2:00 AM - 3:00 AM	1	2	3
3:00 AM - 4:00 AM	3	1	4
4:00 AM - 5:00 AM	7	8	15
5:00 AM - 6:00 AM	12	25	37
6:00 AM - 7:00 AM	52	63	115
7:00 AM - 8:00 AM	99	122	221
8:00 AM - 9:00 AM	99	125	224
9:00 AM - 10:00 AM	87	85	172
10:00 AM - 11:00 AM	117	86	203
11:00 AM - 12:00 PM	133	106	239
Total	**627**	**627**	**1,254**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	140	128	268
1:00 PM - 2:00 PM	177	123	300
2:00 PM - 3:00 PM	222	152	374
3:00 PM - 4:00 PM	226	154	380
4:00 PM - 5:00 PM	223	116	339
5:00 PM - 6:00 PM	221	140	361
6:00 PM - 7:00 PM	166	115	281
7:00 PM - 8:00 PM	110	77	187
8:00 PM - 9:00 PM	65	51	116
9:00 PM - 10:00 PM	68	32	100
10:00 PM - 11:00 PM	34	20	54
11:00 PM - 12:00 AM	27	23	50
Total	**1,679**	**1,131**	**2,810**

24-Hour	*EB*	*Volume*	*2,306*	*24-Hour*	*WB*	*Volume*	*1,758*



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 36. Central Ave between Citrus St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

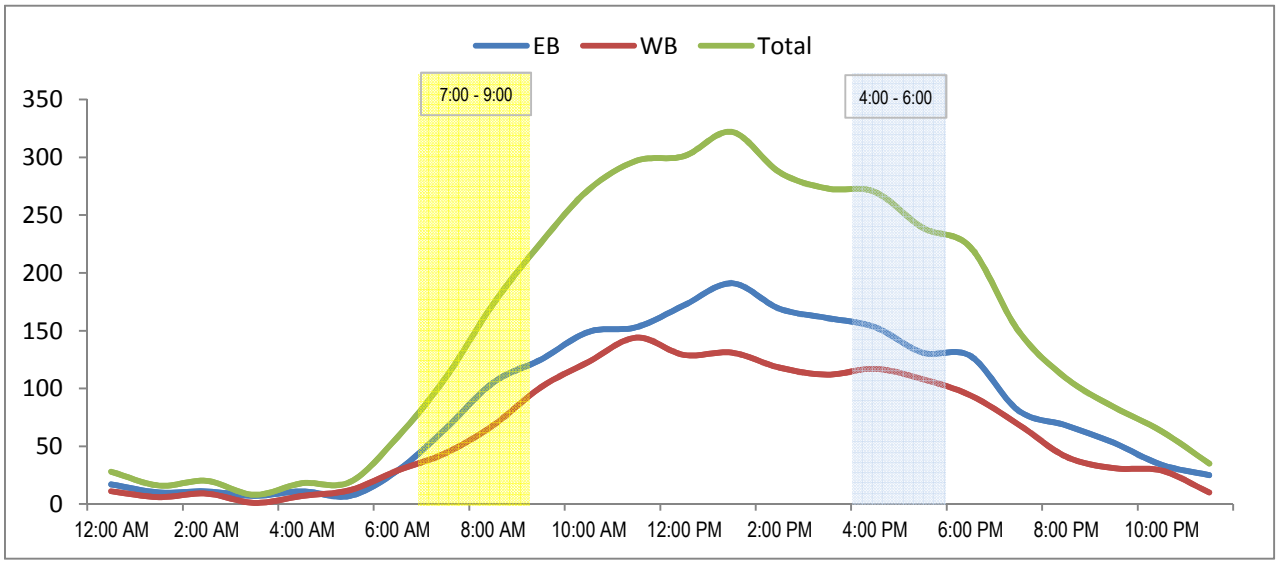
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***3,599***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	17	11	28
1:00 AM - 2:00 AM	10	6	16
2:00 AM - 3:00 AM	11	9	20
3:00 AM - 4:00 AM	7	1	8
4:00 AM - 5:00 AM	11	7	18
5:00 AM - 6:00 AM	7	12	19
6:00 AM - 7:00 AM	29	29	58
7:00 AM - 8:00 AM	65	44	109
8:00 AM - 9:00 AM	105	68	173
9:00 AM - 10:00 AM	125	101	226
10:00 AM - 11:00 AM	149	123	272
11:00 AM - 12:00 PM	153	144	297
Total	**689**	**555**	**1,244**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	172	129	301
1:00 PM - 2:00 PM	191	131	322
2:00 PM - 3:00 PM	169	118	287
3:00 PM - 4:00 PM	161	112	273
4:00 PM - 5:00 PM	153	117	270
5:00 PM - 6:00 PM	131	108	239
6:00 PM - 7:00 PM	128	94	222
7:00 PM - 8:00 PM	81	69	150
8:00 PM - 9:00 PM	68	41	109
9:00 PM - 10:00 PM	53	31	84
10:00 PM - 11:00 PM	34	29	63
11:00 PM - 12:00 AM	25	10	35
Total	**1,366**	**989**	**2,355**

24-Hour	***EB***	***Volume***	***2,055***	***24-Hour***	***WB***	***Volume***	***1,544***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 36. Central Ave between Citrus St and New Jersey Ave

Orientation: *East-West*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

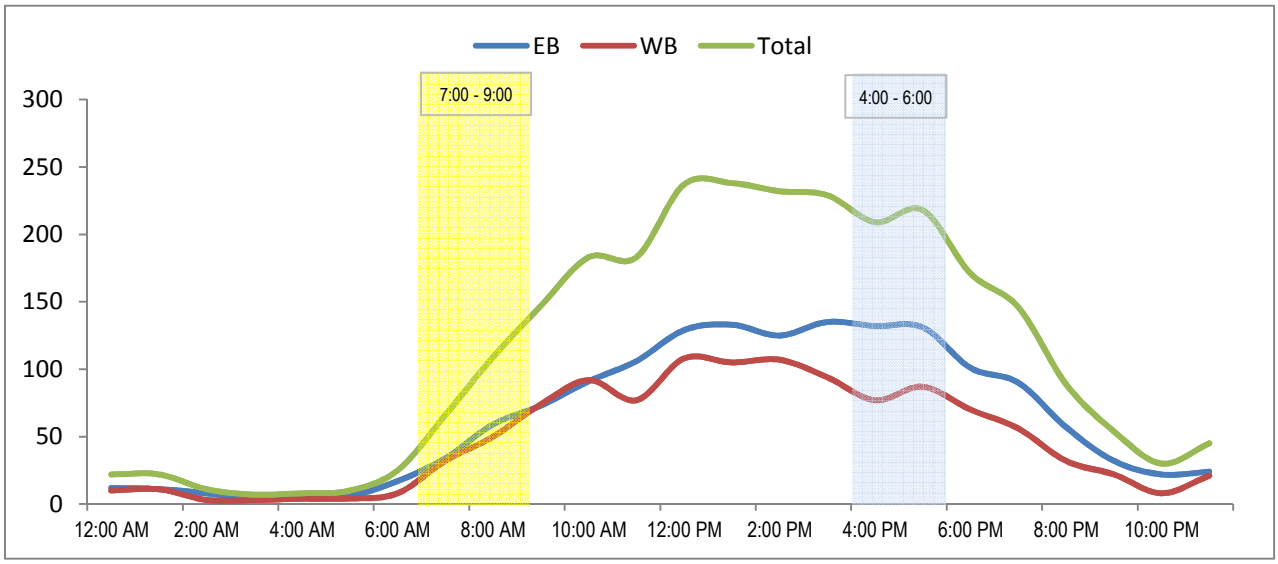
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***2,691***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	12	10	22
1:00 AM - 2:00 AM	11	11	22
2:00 AM - 3:00 AM	8	3	11
3:00 AM - 4:00 AM	4	3	7
4:00 AM - 5:00 AM	4	4	8
5:00 AM - 6:00 AM	6	4	10
6:00 AM - 7:00 AM	17	8	25
7:00 AM - 8:00 AM	34	32	66
8:00 AM - 9:00 AM	59	50	109
9:00 AM - 10:00 AM	73	74	147
10:00 AM - 11:00 AM	91	92	183
11:00 AM - 12:00 PM	106	77	183
Total	**425**	**368**	**793**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	129	108	237
1:00 PM - 2:00 PM	133	105	238
2:00 PM - 3:00 PM	125	107	232
3:00 PM - 4:00 PM	135	94	229
4:00 PM - 5:00 PM	132	77	209
5:00 PM - 6:00 PM	131	87	218
6:00 PM - 7:00 PM	101	70	171
7:00 PM - 8:00 PM	90	56	146
8:00 PM - 9:00 PM	57	32	89
9:00 PM - 10:00 PM	32	22	54
10:00 PM - 11:00 PM	22	8	30
11:00 PM - 12:00 AM	24	21	45
Total	**1,111**	**787**	**1,898**

24-Hour EB Volume	***1,536***	***24-Hour WB Volume***	***1,155***



RICK ENGINEERING COMPANY
Traffic Division

4-Day Segment Count

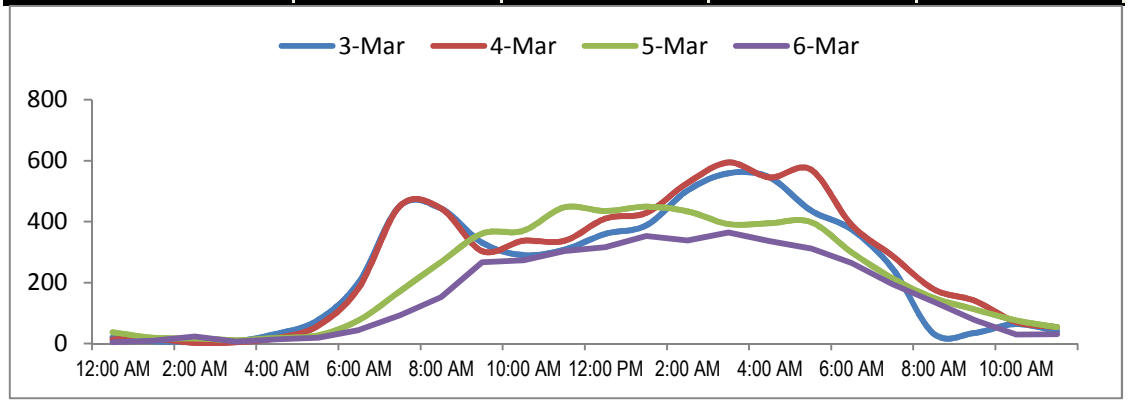
Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 37. Central Ave between Cypress Ave and Olive St
Orientation: *East-West*
Day 1 *Thursday, March 03, 2016*
Day 2 *Friday, March 04, 2016*
Day 3 *Saturday, March 05, 2016*
Day 4 *Sunday, March 06, 2016*
AVC Proj. No: *16-0493*

Average Daily Traffic	***5,329***
Highest Daily Traffic	***6,363***

Time	Hourly Volume			
	3-Mar	4-Mar	5-Mar	6-Mar
12:00 AM - 1:00 AM	20	13	37	4
1:00 AM - 2:00 AM	8	17	19	10
2:00 AM - 3:00 AM	6	2	17	23
3:00 AM - 4:00 AM	8	4	11	6
4:00 AM - 5:00 AM	32	18	18	14
5:00 AM - 6:00 AM	77	58	27	19
6:00 AM - 7:00 AM	202	184	77	44
7:00 AM - 8:00 AM	452	452	172	93
8:00 AM - 9:00 AM	443	443	268	152
9:00 AM - 10:00 AM	331	303	361	267
10:00 AM - 11:00 AM	290	337	370	273
11:00 AM - 12:00 PM	308	337	447	304
12:00 PM - 1:00 PM	360	410	435	316
1:00 PM - 2:00 PM	388	429	449	353
2:00 PM - 3:00 PM	502	527	434	338
3:00 PM - 4:00 PM	559	594	392	365
4:00 PM - 5:00 PM	545	545	395	336
5:00 PM - 6:00 PM	437	571	399	312
6:00 PM - 7:00 PM	374	389	299	264
7:00 PM - 8:00 PM	245	287	214	194
8:00 PM - 9:00 PM	32	178	150	137
9:00 PM - 10:00 PM	35	140	112	77
10:00 PM - 11:00 PM	64	71	76	30
11:00 PM - 12:00 AM	41	54	54	31
Total	**5,759**	**6,363**	**5,233**	**3,962**



RICK ENGINEERING COMPANY
Traffic Division

Day 1 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 37. Central Ave between Cypress Ave and Olive St

Orientation: *East-West*

Date of Count: *Thursday, March 03, 2016*

Analysts: *DASH*

Weather: *Sunny*

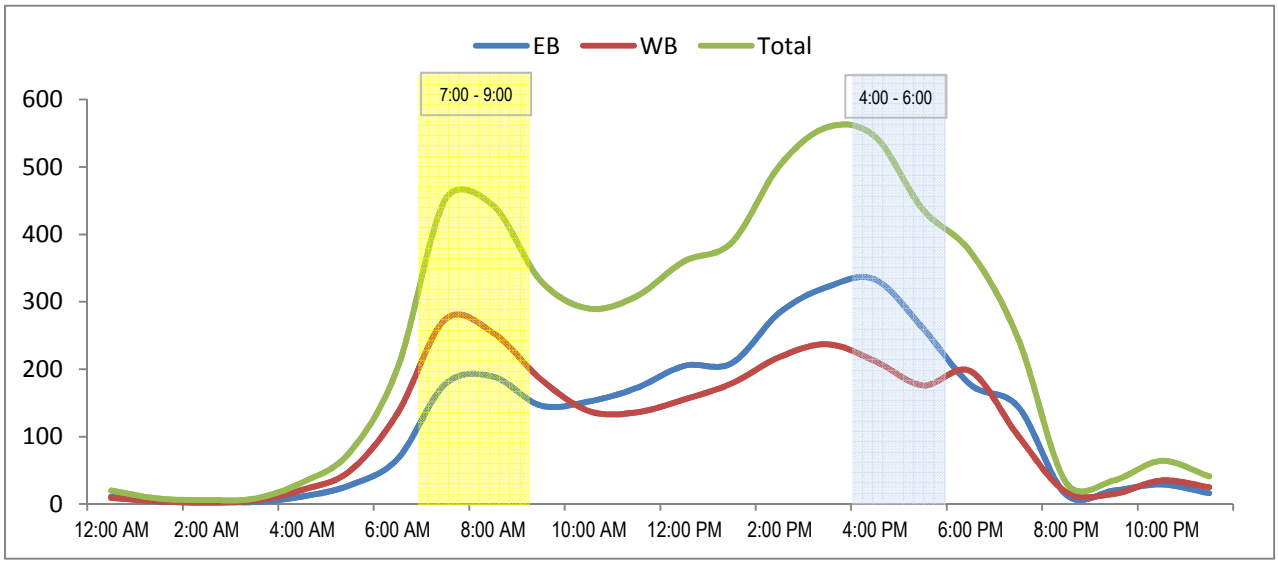
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,759***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	11	9	20
1:00 AM - 2:00 AM	4	4	8
2:00 AM - 3:00 AM	4	2	6
3:00 AM - 4:00 AM	3	5	8
4:00 AM - 5:00 AM	11	21	32
5:00 AM - 6:00 AM	28	49	77
6:00 AM - 7:00 AM	67	135	202
7:00 AM - 8:00 AM	178	274	452
8:00 AM - 9:00 AM	189	254	443
9:00 AM - 10:00 AM	146	185	331
10:00 AM - 11:00 AM	152	138	290
11:00 AM - 12:00 PM	172	136	308
Total	**965**	**1,212**	**2,177**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	205	155	360
1:00 PM - 2:00 PM	209	179	388
2:00 PM - 3:00 PM	284	218	502
3:00 PM - 4:00 PM	322	237	559
4:00 PM - 5:00 PM	333	212	545
5:00 PM - 6:00 PM	261	176	437
6:00 PM - 7:00 PM	177	197	374
7:00 PM - 8:00 PM	144	101	245
8:00 PM - 9:00 PM	14	18	32
9:00 PM - 10:00 PM	20	15	35
10:00 PM - 11:00 PM	29	35	64
11:00 PM - 12:00 AM	16	25	41
Total	**2,014**	**1,568**	**3,582**

24-Hour EB Volume	***2,979***	***24-Hour WB Volume***	***2,780***



RICK ENGINEERING COMPANY
Traffic Division

Day-2 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 37. Central Ave between Cypress Ave and Olive St

Orientation: *East-West*

Date of Count: *Friday, March 04, 2016*

Analysts: *DASH*

Weather: *Sunny*

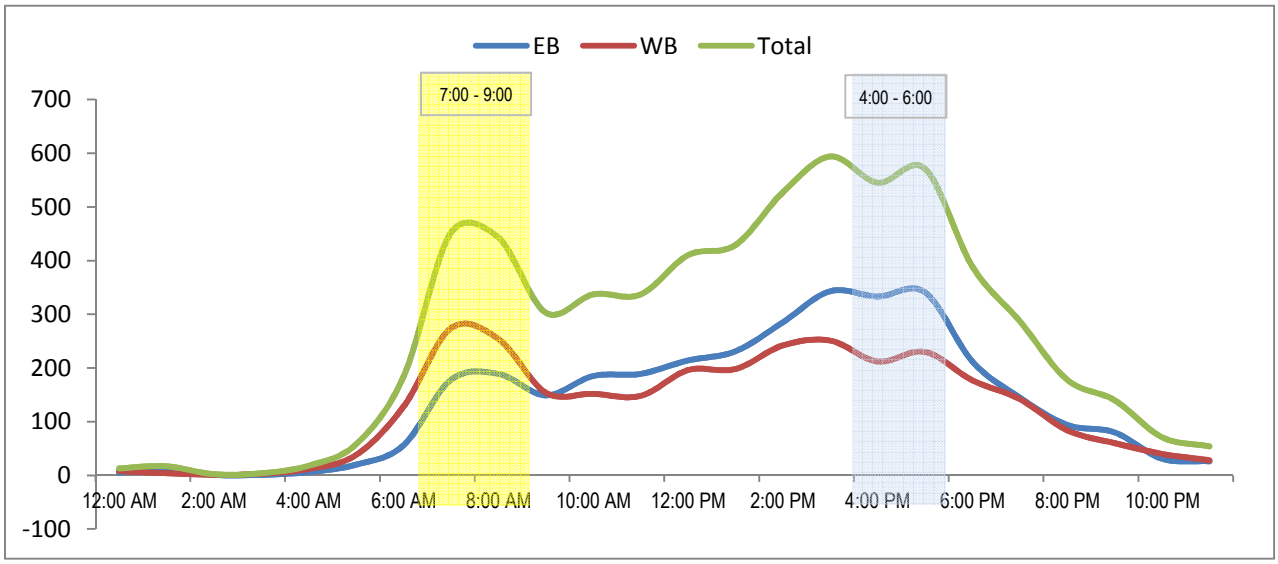
AVC Proj. No: *16-0493*

24 Hour Segment Volume			6,363

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	5	8	13
1:00 AM - 2:00 AM	13	4	17
2:00 AM - 3:00 AM	1	1	2
3:00 AM - 4:00 AM	1	3	4
4:00 AM - 5:00 AM	6	12	18
5:00 AM - 6:00 AM	20	38	58
6:00 AM - 7:00 AM	56	128	184
7:00 AM - 8:00 AM	178	274	452
8:00 AM - 9:00 AM	189	254	443
9:00 AM - 10:00 AM	149	154	303
10:00 AM - 11:00 AM	185	152	337
11:00 AM - 12:00 PM	189	148	337
Total	**992**	**1,176**	**2,168**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	214	196	410
1:00 PM - 2:00 PM	231	198	429
2:00 PM - 3:00 PM	285	242	527
3:00 PM - 4:00 PM	343	251	594
4:00 PM - 5:00 PM	333	212	545
5:00 PM - 6:00 PM	341	230	571
6:00 PM - 7:00 PM	212	177	389
7:00 PM - 8:00 PM	145	142	287
8:00 PM - 9:00 PM	94	84	178
9:00 PM - 10:00 PM	80	60	140
10:00 PM - 11:00 PM	31	40	71
11:00 PM - 12:00 AM	26	28	54
Total	**2,335**	**1,860**	**4,195**

24-Hour EB Volume	3,327	24-Hour WB Volume	3,036



RICK ENGINEERING COMPANY
Traffic Division

Day-3 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 37. Central Ave between Cypress Ave and Olive St

Orientation: *East-West*

Date of Count: *Saturday, March 05, 2016*

Analysts: *DASH*

Weather: *Sunny*

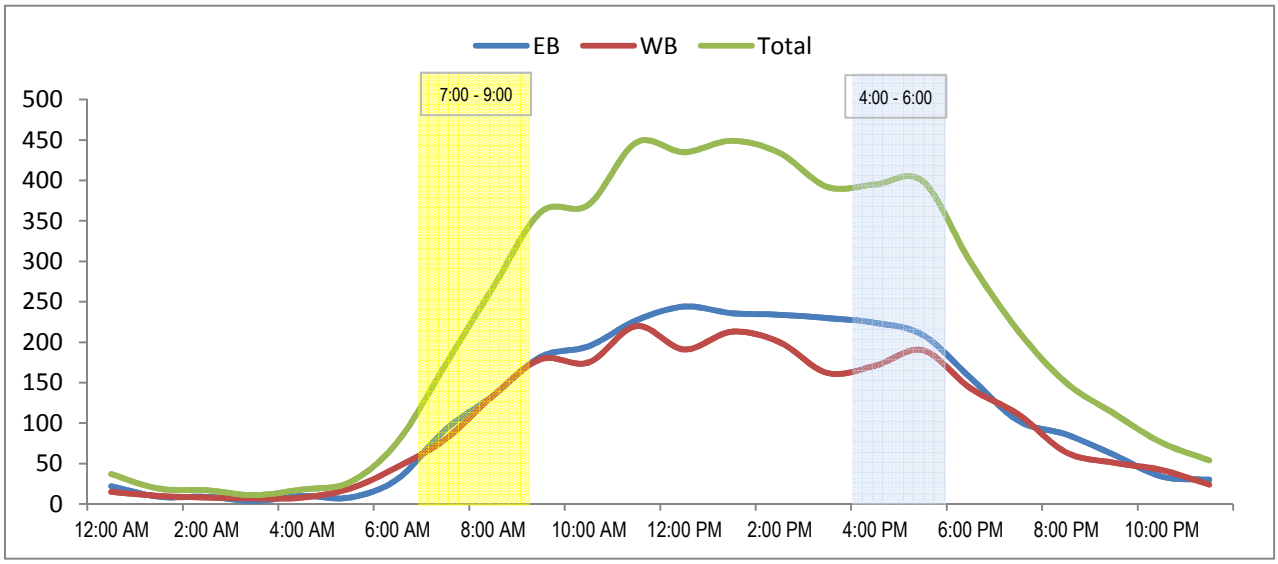
AVC Proj. No: *16-0493*

24 Hour Segment Volume			***5,233***

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	22	15	37
1:00 AM - 2:00 AM	9	10	19
2:00 AM - 3:00 AM	9	8	17
3:00 AM - 4:00 AM	4	7	11
4:00 AM - 5:00 AM	10	8	18
5:00 AM - 6:00 AM	8	19	27
6:00 AM - 7:00 AM	31	46	77
7:00 AM - 8:00 AM	92	80	172
8:00 AM - 9:00 AM	134	134	268
9:00 AM - 10:00 AM	182	179	361
10:00 AM - 11:00 AM	195	175	370
11:00 AM - 12:00 PM	227	220	447
Total	**923**	**901**	**1,824**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	244	191	435
1:00 PM - 2:00 PM	236	213	449
2:00 PM - 3:00 PM	234	200	434
3:00 PM - 4:00 PM	230	162	392
4:00 PM - 5:00 PM	224	171	395
5:00 PM - 6:00 PM	209	190	399
6:00 PM - 7:00 PM	156	143	299
7:00 PM - 8:00 PM	103	111	214
8:00 PM - 9:00 PM	86	64	150
9:00 PM - 10:00 PM	61	51	112
10:00 PM - 11:00 PM	34	42	76
11:00 PM - 12:00 AM	30	24	54
Total	**1,847**	**1,562**	**3,409**

24-Hour	***EB***	***Volume***	***2,770***	***24-Hour***	***WB***	***Volume***	***2,463***



RICK ENGINEERING COMPANY
Traffic Division

Day-4 Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

AVC

Location: 37. Central Ave between Cypress Ave and Olive St

Orientation: *East-West*

Date of Count: *Sunday, March 06, 2016*

Analysts: *DASH*

Weather: *Sunny*

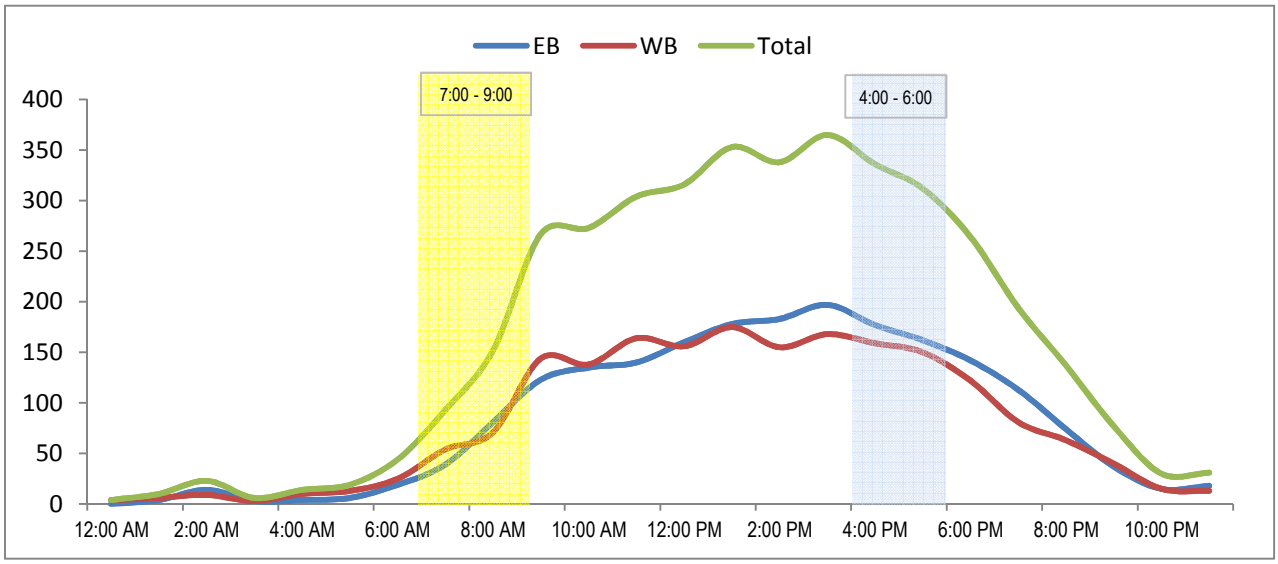
AVC Proj. No: *16-0493*

24 Hour Segment Volume			*3,962*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	0	4	4
1:00 AM - 2:00 AM	4	6	10
2:00 AM - 3:00 AM	14	9	23
3:00 AM - 4:00 AM	3	3	6
4:00 AM - 5:00 AM	4	10	14
5:00 AM - 6:00 AM	6	13	19
6:00 AM - 7:00 AM	19	25	44
7:00 AM - 8:00 AM	39	54	93
8:00 AM - 9:00 AM	81	71	152
9:00 AM - 10:00 AM	123	144	267
10:00 AM - 11:00 AM	135	138	273
11:00 AM - 12:00 PM	140	164	304
Total	**568**	**641**	**1,209**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	160	156	316
1:00 PM - 2:00 PM	178	175	353
2:00 PM - 3:00 PM	183	155	338
3:00 PM - 4:00 PM	197	168	365
4:00 PM - 5:00 PM	177	159	336
5:00 PM - 6:00 PM	162	150	312
6:00 PM - 7:00 PM	142	122	264
7:00 PM - 8:00 PM	113	81	194
8:00 PM - 9:00 PM	74	63	137
9:00 PM - 10:00 PM	37	40	77
10:00 PM - 11:00 PM	15	15	30
11:00 PM - 12:00 AM	18	13	31
Total	**1,456**	**1,297**	**2,753**

24-Hour	*EB*	*Volume*	*2,024*	*24-Hour*	*WB*	*Volume*	*1,938*



APPENDIX C

HCM 2010 LOS METHODOLOGY

18-3. The symbol Φ shown in this exhibit represents the word "phase," and the number following the symbol represents the phase number.

Exhibit 18-3 shows one way that traffic movements can be assigned to each of the eight phases. These assignments are illustrative, but they are not uncommon. Each left-turn movement is assigned to an exclusive phase. During this phase, the left-turn movement is "protected" so that it receives a green arrow indication. Each through, right-turn, and pedestrian movement combination is also assigned to an exclusive phase. The dashed arrows indicate turn movements that are served in a "permitted" manner so that the turn can be completed only after yielding the right-of-way to conflicting movements. Additional information about traffic signal controller operation is provided in Chapter 31, Signalized Intersections: Supplemental.

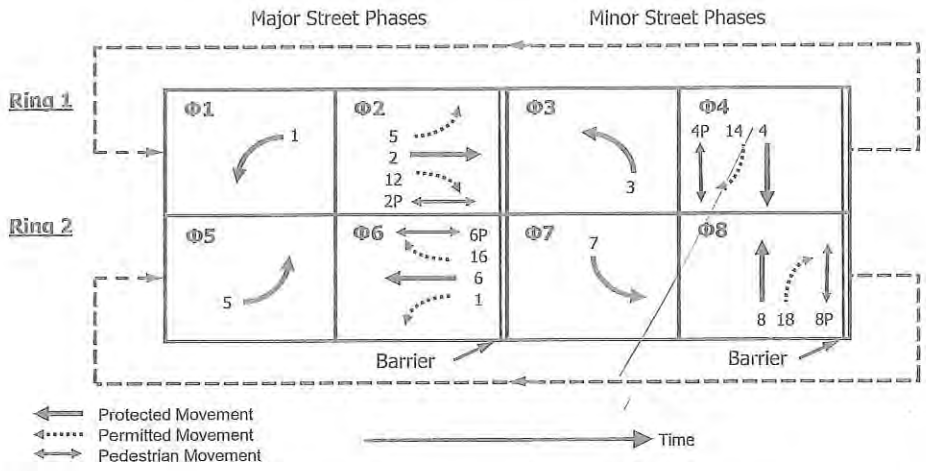


Exhibit 18-3
Dual-Ring Structure with Illustrative Movement Assignments

LOS CRITERIA

This subsection describes the LOS criteria for the automobile, pedestrian, and bicycle modes. The criteria for the automobile mode are different from those for the nonautomobile modes. Specifically, the automobile-mode criteria are based on performance measures that are field measurable and perceivable by travelers. The criteria for the nonautomobile modes are based on scores reported by travelers indicating their perception of service quality.

Automobile Mode

All uses of the word "volume" or the phrase "volume-to-capacity ratio" in this chapter refer to demand volume or demand-volume-to-capacity ratio.

LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay *and* volume-to-capacity ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group. The following paragraphs describe each LOS.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally

favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

Exhibit 18-4 lists the LOS thresholds established for the automobile mode at a signalized intersection.

Exhibit 18-4
LOS Criteria: Automobile Mode

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	≤1.0	>1.0
≤10	A	F
>10–20	B	F
>20–35	C	F
>35–55	D	F
>55–80	E	F
>80	F	F

Note: [a] For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

1. INTRODUCTION

Two-way STOP-controlled (TWSC) intersections are common in the United States. One typical configuration is a four-leg intersection, where one street—the *major street*—is uncontrolled, while the other street—the *minor street*—is controlled by STOP signs. The other typical configuration is a three-leg intersection, where the single minor-street approach (i.e., the stem of the T configuration) is controlled by a STOP sign. Minor street approaches can be public streets or private driveways. Chapter 19, Two-Way STOP-Controlled Intersections, presents concepts and procedures for analyzing these types of intersections. Chapter 9 provides a glossary and list of symbols, including those used for TWSC intersections.

Three-leg intersections are considered a standard type of TWSC intersection, when the stem of the T is controlled by a STOP sign.

Capacity analysis of TWSC intersections requires a clear description and understanding of the interaction between travelers on the minor, or STOP-controlled, approach with travelers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction. Procedures described in this chapter rely primarily on field measurements of TWSC performance in the United States (*1*) that have been applied to a gap acceptance model developed and refined in Germany (*2*).

INTERSECTION ANALYSIS BOUNDARIES AND TRAVEL MODES

The intersection boundaries for a TWSC intersection analysis are assumed to be those of an isolated intersection (i.e., not affected by upstream or downstream intersections), with the exception of TWSC intersections that are located within 0.25 mi of a signalized intersection (for the major-street approaches). This chapter presents methodologies to assess TWSC intersections for both pedestrians and motor vehicles. A discussion of how the procedures for motor vehicles could potentially apply to an analysis of bicycle movements is also provided.

LEVEL-OF-SERVICE CRITERIA

LOS is not defined for the major-street approaches or for the overall intersection, as major-street through vehicles are assumed to experience no delay.

Level of service (LOS) for a TWSC intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns by using criteria given in Exhibit 19-1. LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons: (*a*) major-street through vehicles are assumed to experience zero delay; (*b*) the disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles; and (*c*) the resulting low delay can mask important LOS deficiencies for minor movements. As Exhibit 19-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The LOS criteria for TWSC intersections are somewhat different from the criteria used in Chapter 18 for signalized intersections, primarily because user perceptions differ among transportation facility types. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will

present greater delay than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals, which can reduce users' delay tolerance.

Exhibit 19-1
Level-of-Service Criteria: Automobile Mode

Control Delay (s/vehicle)	LOS by Volume-to-Capacity Ratio $v/c \leq 1.0$	$v/c > 1.0$
0–10	A	F
>10–15	B	F
>15–25	C	F
>25–35	D	F
>35–50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

Pedestrian LOS at TWSC intersections is defined for pedestrians crossing a traffic stream not controlled by a STOP sign; it also applies to midblock pedestrian crossings. LOS criteria for pedestrians are given in Exhibit 19-2.

Exhibit 19-2
Level-of-Service Criteria: Pedestrian Mode

LOS	Control Delay (s/pedestrian)	Comments
A	0–5	Usually no conflicting traffic
B	5–10	Occasionally some delay due to conflicting traffic
C	10–20	Delay noticeable to pedestrians, but not inconveniencing
D	20–30	Delay noticeable and irritating, increased likelihood of risk taking
E	30–45	Delay approaches tolerance level, risk-taking behavior likely
F	>45	Delay exceeds tolerance level, high likelihood of pedestrian risk taking

Note: Control delay may be interpreted as s/pedestrian group if groups of pedestrians were counted as opposed to individual pedestrians.

LOS F for pedestrians occurs when there are not enough gaps of suitable size to allow waiting pedestrians to cross through traffic on the major street safely. This situation is typically evident from extremely long control delays. The method is based on a constant critical headway. In the field, however, LOS F may also appear in the form of crossing pedestrians selecting smaller-than-usual gaps. In such cases, safety could be a concern that warrants further study.

REQUIRED INPUT DATA

Analysis of a TWSC intersection requires the following data:

1. Number and configuration of lanes on each approach;
2. Percentage of heavy vehicles for each movement;
3. Either of the following:
   a. Demand flow rate for each entering vehicular movement and each pedestrian crossing movement during the peak 15 min, or
   b. Demand flow rate for each entering vehicular movement and each pedestrian crossing movement during the peak hour and a peak hour factor for the hour;
4. Special geometric factors such as
   a. Unique channelization aspects,
   b. Existence of a two-way left-turn lane or raised or striped median storage (or both),

vehicles on the other approaches. In Case 2, some uncertainty is introduced with a vehicle on the opposing approach, and thus the saturation headway will be greater than for Case 1. In Case 3, vehicles on one of the conflicting approaches further restrict the departure rate of vehicles on the subject approach, and the saturation headway will be longer than for Case 1 or Case 2. In Case 4, two vehicles are waiting on opposing or conflicting approaches, and saturation headways are even longer. When vehicles are present on all approaches, as in Case 5, saturation headways are the longest of any of the cases because the potential for conflict between vehicles is greatest. The increasing degree of potential conflict translates directly into longer driver decision times and longer saturation headways. Because no traffic signal controls the stream movement or allocates the right-of-way to each conflicting traffic stream, the rate of departure is controlled by the interactions between the traffic streams.

Capacity of an AWSC can be described by saturation headway, departure headway, and service time.

Therefore, the operation at an AWSC intersection can be described numerically by a few key time-based terms:

- The saturation headway, h_{si}, is the time between departures of successive vehicles on a given approach for a particular case (case i), as described above, assuming a continuous queue.
- The departure headway, h_d, is the average time between departures of successive vehicles on a given approach accounting for the probability of each possible case.
- The service time, t_s, is the average time spent by a vehicle in first position waiting to depart. It is equal to the departure headway minus the time it takes a vehicle to move from second position into first position (the move-up time, m).

INTERSECTION ANALYSIS BOUNDARIES AND TRAVEL MODES

The intersection analysis boundaries for an AWSC analysis are assumed to be those of an isolated intersection; that is, no upstream or downstream effects are accounted for in the analysis. The present methodology is limited to motor vehicles.

LEVEL-OF-SERVICE CRITERIA

The level-of-service (LOS) criteria for AWSC intersections are given in Exhibit 20-2. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio*	
	$v/c \leq 1.0$	$v/c > 1.0$
0–10	A	F
>10–15	B	F
>15–25	C	F
>25–35	D	F
>35–50	E	F
>50	F	F

Note: * For approaches and intersectionwide assessment, LOS is defined solely by control delay.

Exhibit 20-2
LOS Criteria: Automobile Mode

REQUIRED INPUT DATA

Analysis of an AWSC intersection requires the following data:

1. Number and configuration of lanes on each approach;
2. Percentage of heavy vehicles;
3. Turning movement demand flow rate for each entering lane or, alternatively, hourly demand volume and peak hour factor; and
4. Length of analysis period—generally a peak 15-min period within the peak hour, although any 15-min period can be analyzed.

SCOPE OF THE METHODOLOGY

This chapter focuses on the operation of AWSC intersections. This version of the AWSC intersection analysis procedures is primarily a result of studies conducted by National Cooperative Highway Research Program Project 3-46 (*1*).

LIMITATIONS OF THE METHODOLOGY

Automobile Mode

The methodologies in this chapter apply to isolated AWSC intersections with up to three lanes on each approach. They do not account for interaction effects with other intersections. The methodologies do not apply to AWSC intersections with more than four approaches. In addition, the effect of conflicting pedestrians on automobiles is not considered in this procedure. Conflicting pedestrian movements are likely to increase the saturation headway of affected vehicular movements, but the magnitude of this effect is unknown as of the publication of this edition of the HCM.

Pedestrian and Bicycle Modes

The current methodologies for analyzing LOS and delay at AWSC intersections do not extend to pedestrians and apply to bicycles only in limited situations that are not supported by research at the time of publication of this edition. As such, there are no set LOS standards that apply to pedestrians or bicycles at AWSC intersections, nor can pedestrian or bicycle delay, capacity, or quality of service be quantitatively assessed by using the procedures described in this chapter. Additional research on pedestrian and bicyclist behavior and operations at AWSC intersections needs to be done before procedures can be developed that adequately address these issues. A discussion of qualitative effects is included in the methodology section of this chapter.

APPENDIX D

INTERSECTION LOS CALCULATION SHEETS

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

02/01/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	38	14	67	20	211	17	530	506	323	458	54
Future Volume (veh/h)	25	38	14	67	20	211	17	530	506	323	458	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	36	56	24	88	0	285	24	609	625	380	509	89
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.69	0.68	0.58	0.76	0.63	0.80	0.71	0.87	0.81	0.85	0.90	0.61
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	171	73	209	0	388	83	594	523	392	1533	267
Arrive On Green	0.19	0.19	0.19	0.12	0.00	0.12	0.05	0.34	0.34	0.22	0.51	0.51
Sat Flow, veh/h	571	889	381	1774	0	3293	1774	1770	1559	1774	3008	523
Grp Volume(v), veh/h	116	0	0	88	0	285	24	609	625	380	298	300
Grp Sat Flow(s),veh/h/ln	1841	0	0	1774	0	1647	1774	1770	1559	1774	1770	1762
Q Serve(g_s), s	7.3	0.0	0.0	6.2	0.0	11.3	1.8	45.3	45.3	28.7	13.4	13.6
Cycle Q Clear(g_c), s	7.3	0.0	0.0	6.2	0.0	11.3	1.8	45.3	45.3	28.7	13.4	13.6
Prop In Lane	0.31		0.21	1.00		1.00	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	355	0	0	209	0	388	83	594	523	392	902	898
V/C Ratio(X)	0.33	0.00	0.00	0.42	0.00	0.73	0.29	1.03	1.19	0.97	0.33	0.33
Avail Cap(c_a), veh/h	355	0	0	209	0	388	83	594	523	392	902	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.37	0.37	0.37	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	0.0	55.3	0.0	57.5	62.2	44.9	44.9	52.2	19.5	19.6
Incr Delay (d2), s/veh	2.4	0.0	0.0	6.1	0.0	11.7	0.3	29.2	94.8	37.4	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	3.4	0.0	5.8	0.9	26.9	33.2	18.1	6.8	6.8
LnGrp Delay(d),s/veh	49.4	0.0	0.0	61.4	0.0	69.2	62.5	74.1	139.6	89.6	20.5	20.6
LnGrp LOS	D			E		E	E	F	F	F	C	C
Approach Vol, veh/h		116			373			1258			978	
Approach Delay, s/veh		49.4			67.4			106.4			47.4	
Approach LOS		D			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.0	49.9		30.6	10.5	73.4		20.5
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	29.8	* 45		26.0	6.3	* 69		15.9
Max Q Clear Time (g_c+I1), s	30.7	47.3		9.3	3.8	15.6		13.3
Green Ext Time (p_c), s	0.0	0.0		0.2	0.3	1.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	77.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	329	114	46	293	195	214	620	43	156	302	92
Future Volume (veh/h)	312	329	114	46	293	195	214	620	43	156	302	92
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	488	392	152	63	362	227	282	705	60	208	339	108
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.64	0.84	0.75	0.73	0.81	0.86	0.76	0.88	0.72	0.75	0.89	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	1292	571	82	910	404	270	889	76	274	522	164
Arrive On Green	0.13	0.36	0.36	0.04	0.26	0.26	0.15	0.27	0.27	0.08	0.20	0.20
Sat Flow, veh/h	3442	3539	1565	1845	3539	1572	1774	3298	281	3442	2649	831
Grp Volume(v), veh/h	488	392	152	63	362	227	282	378	387	208	225	222
Grp Sat Flow(s),veh/h/ln	1721	1770	1565	1845	1770	1572	1774	1770	1809	1721	1770	1710
Q Serve(g_s), s	14.0	8.3	7.2	3.5	8.9	9.2	16.0	20.8	20.9	6.2	12.3	12.6
Cycle Q Clear(g_c), s	14.0	8.3	7.2	3.5	8.9	9.2	16.0	20.8	20.9	6.2	12.3	12.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.49
Lane Grp Cap(c), veh/h	459	1292	571	82	910	404	270	477	488	274	349	337
V/C Ratio(X)	1.06	0.30	0.27	0.77	0.40	0.56	1.04	0.79	0.79	0.76	0.64	0.66
Avail Cap(c_a), veh/h	459	1292	571	141	910	404	270	539	551	393	472	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.98	0.98	0.98	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	45.5	23.8	23.4	49.6	32.3	16.4	44.5	35.6	35.6	47.3	38.8	38.9
Incr Delay (d2), s/veh	59.7	0.6	1.1	5.4	1.3	5.5	66.5	7.1	7.0	2.5	1.9	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	4.1	3.3	1.9	4.5	4.5	12.8	11.1	11.4	3.0	6.2	6.1
LnGrp Delay(d),s/veh	105.2	24.4	24.6	55.0	33.6	21.9	111.0	42.7	42.6	49.9	40.7	41.0
LnGrp LOS	F	C	C	E	C	C	F	D	D	D	D	D
Approach Vol, veh/h		1032			652			1047			655	
Approach Delay, s/veh		62.7			31.6			61.1			43.7	
Approach LOS		E			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	44.3	20.0	26.7	20.0	33.0	12.4	34.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	8.0	33.0	16.0	28.0	14.0	* 27	12.0	32.0
Max Q Clear Time (g_c+I1), s	5.5	10.3	18.0	14.6	16.0	11.2	8.2	22.9
Green Ext Time (p_c), s	0.0	3.9	0.0	4.2	0.0	2.4	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	46	44	69	75	85	73	763	56	28	437	34
Future Volume (veh/h)	46	46	44	69	75	85	73	763	56	28	437	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	75	60	64	111	88	104	96	848	68	36	465	52
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.61	0.77	0.69	0.62	0.85	0.82	0.76	0.90	0.82	0.78	0.94	0.65
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	183	168	233	187	191	123	925	781	47	844	705
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.07	0.50	0.50	0.03	0.45	0.45
Sat Flow, veh/h	500	531	489	518	543	554	1774	1863	1574	1774	1863	1555
Grp Volume(v), veh/h	199	0	0	303	0	0	96	848	68	36	465	52
Grp Sat Flow(s),veh/h/ln	1519	0	0	1615	0	0	1774	1863	1574	1774	1863	1555
Q Serve(g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	4.8	37.9	2.0	1.8	16.4	1.7
Cycle Q Clear(g_c), s	8.5	0.0	0.0	12.8	0.0	0.0	4.8	37.9	2.0	1.8	16.4	1.7
Prop In Lane	0.38		0.32	0.37		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	578	0	0	610	0	0	123	925	781	47	844	705
V/C Ratio(X)	0.34	0.00	0.00	0.50	0.00	0.00	0.78	0.92	0.09	0.77	0.55	0.07
Avail Cap(c_a), veh/h	578	0	0	610	0	0	217	1035	874	79	890	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	23.4	0.0	0.0	41.2	20.9	11.9	43.5	17.9	13.9
Incr Delay (d2), s/veh	1.6	0.0	0.0	2.9	0.0	0.0	1.0	1.3	0.0	22.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	6.5	0.0	0.0	2.4	19.7	0.9	1.2	8.5	0.7
LnGrp Delay(d),s/veh	23.6	0.0	0.0	26.3	0.0	0.0	42.2	22.3	11.9	66.3	18.6	14.0
LnGrp LOS	C			C			D	C	B	E	B	B
Approach Vol, veh/h		199			303			1012			553	
Approach Delay, s/veh		23.6			26.3			23.5			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	48.7		34.9	10.3	44.8		34.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	50.0		24.0	11.0	43.0		24.0
Max Q Clear Time (g_c+I1), s	3.8	39.9		10.5	6.8	18.4		14.8
Green Ext Time (p_c), s	0.0	4.8		1.9	0.1	7.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	68	348	409	8	55	80
Future Volume (veh/h)	68	348	409	8	55	80
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	100	387	538	8	74	105
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.68	0.90	0.76	1.00	0.74	0.76
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	132	2904	2515	37	161	146
Arrive On Green	0.07	0.82	1.00	1.00	0.09	0.09
Sat Flow, veh/h	1845	3632	3662	53	1774	1615
Grp Volume(v), veh/h	100	387	267	279	74	105
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1852	1774	1615
Q Serve(g_s), s	4.8	2.0	0.0	0.0	3.6	5.7
Cycle Q Clear(g_c), s	4.8	2.0	0.0	0.0	3.6	5.7
Prop In Lane	1.00			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	132	2904	1247	1305	161	146
V/C Ratio(X)	0.76	0.13	0.21	0.21	0.46	0.72
Avail Cap(c_a), veh/h	390	2904	1247	1305	434	395
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	41.0	1.6	0.0	0.0	38.8	39.8
Incr Delay (d2), s/veh	7.9	0.1	0.4	0.4	2.0	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.0	0.1	0.1	1.8	5.2
LnGrp Delay(d),s/veh	48.9	1.7	0.4	0.4	40.9	46.2
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		487	546		179	
Approach Delay, s/veh		11.4	0.4		44.0	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		77.8		12.2	10.4	67.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		60.0		22.0	19.0	37.0		
Max Q Clear Time (g_c+I1), s		4.0		7.7	6.8	2.0		
Green Ext Time (p_c), s		4.3		0.6	0.2	4.2		

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	304	44	33	318	17	66	23	26	38	22	94
Future Volume (veh/h)	74	304	44	33	318	17	66	23	26	38	22	94
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.97	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	84	345	52	44	379	24	92	40	36	56	24	116
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.88	0.88	0.85	0.75	0.84	0.71	0.72	0.58	0.72	0.68	0.92	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	2022	302	57	2112	133	166	72	48	224	85	280
Arrive On Green	0.12	1.00	1.00	0.06	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1845	3087	461	1845	3374	213	576	398	266	863	468	1544
Grp Volume(v), veh/h	84	196	201	44	198	205	168	0	0	80	0	116
Grp Sat Flow(s),veh/h/ln	1845	1770	1778	1845	1770	1817	1240	0	0	1331	0	1544
Q Serve(g_s), s	4.0	0.0	0.0	2.1	0.0	0.0	7.8	0.0	0.0	0.0	0.0	6.0
Cycle Q Clear(g_c), s	4.0	0.0	0.0	2.1	0.0	0.0	12.4	0.0	0.0	4.6	0.0	6.0
Prop In Lane	1.00		0.26	1.00		0.12	0.55		0.21	0.70		1.00
Lane Grp Cap(c), veh/h	110	1159	1164	57	1108	1137	286	0	0	309	0	280
V/C Ratio(X)	0.76	0.17	0.17	0.78	0.18	0.18	0.59	0.00	0.00	0.26	0.00	0.41
Avail Cap(c_a), veh/h	349	1159	1164	246	1108	1137	526	0	0	544	0	532
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	0.0	41.9	0.0	0.0	35.9	0.0	0.0	31.9	0.0	32.6
Incr Delay (d2), s/veh	10.1	0.3	0.3	19.2	0.3	0.3	1.9	0.0	0.0	0.4	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.1	0.1	1.4	0.1	0.1	4.2	0.0	0.0	1.8	0.0	2.6
LnGrp Delay(d),s/veh	49.1	0.3	0.3	61.1	0.3	0.3	37.8	0.0	0.0	32.4	0.0	33.6
LnGrp LOS	D	A	A	E	A	A	D			C		C
Approach Vol, veh/h		481			447			168			196	
Approach Delay, s/veh		8.8			6.3			37.8			33.1	
Approach LOS		A			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	62.9		20.3	9.4	60.3		20.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	35.0		31.0	17.0	30.0		31.0
Max Q Clear Time (g_c+I1), s	4.1	2.0		8.0	6.0	2.0		14.4
Green Ext Time (p_c), s	0.0	3.3		2.1	0.2	3.2		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	306	21	13	296	76	42	169	24	93	82	27
Future Volume (veh/h)	50	306	21	13	296	76	42	169	24	93	82	27
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	64	356	24	20	348	100	56	209	28	100	112	36
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.78	0.86	0.88	0.65	0.85	0.76	0.75	0.81	0.86	0.93	0.73	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	1857	125	32	1416	400	72	281	230	129	265	85
Arrive On Green	0.09	1.00	1.00	0.02	0.53	0.53	0.04	0.15	0.15	0.07	0.19	0.19
Sat Flow, veh/h	1845	3358	225	1845	2696	761	1774	1863	1525	1774	1400	450
Grp Volume(v), veh/h	64	187	193	20	226	222	56	209	28	100	0	148
Grp Sat Flow(s),veh/h/ln	1845	1770	1814	1845	1770	1687	1774	1863	1525	1774	0	1850
Q Serve(g_s), s	3.1	0.0	0.0	1.0	6.3	6.5	2.8	9.7	1.4	5.0	0.0	6.3
Cycle Q Clear(g_c), s	3.1	0.0	0.0	1.0	6.3	6.5	2.8	9.7	1.4	5.0	0.0	6.3
Prop In Lane	1.00		0.12	1.00		0.45	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	83	979	1003	32	930	886	72	281	230	129	0	350
V/C Ratio(X)	0.77	0.19	0.19	0.62	0.24	0.25	0.78	0.74	0.12	0.77	0.00	0.42
Avail Cap(c_a), veh/h	185	979	1003	103	930	886	158	435	356	286	0	576
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	40.5	0.0	0.0	43.9	11.6	11.7	42.8	36.5	33.0	41.0	0.0	32.2
Incr Delay (d2), s/veh	13.5	0.4	0.4	17.8	0.6	0.7	16.4	3.9	0.2	9.2	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.1	0.1	0.7	3.2	3.2	1.7	5.3	0.6	2.8	0.0	3.3
LnGrp Delay(d),s/veh	54.0	0.4	0.4	61.7	12.2	12.3	59.2	40.4	33.3	50.2	0.0	33.0
LnGrp LOS	D	A	A	E	B	B	E	D	C	D		C
Approach Vol, veh/h		444			468			293			248	
Approach Delay, s/veh		8.2			14.4			43.3			39.9	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	55.8	7.6	21.0	8.1	53.3	11.1	17.6
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	5.0	31.0	8.0	28.0	9.0	27.0	14.5	21.0
Max Q Clear Time (g_c+I1), s	3.0	2.0	4.8	8.3	5.1	8.5	7.0	11.7
Green Ext Time (p_c), s	0.0	3.4	0.0	2.1	0.0	3.2	0.2	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	21	367	24	40	359	22	12	8	29	37	29	31
Future Vol, veh/h	21	367	24	40	359	22	12	8	29	37	29	31
Conflicting Peds, #/hr	27	0	11	11	0	27	9	0	6	6	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	180	-	-	110	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	90	67	83	91	69	100	67	60	46	66	60
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	408	36	48	395	32	12	12	48	80	44	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	435	0	0	453	0	0	816	1023	258	791	1025	249
Stage 1	-	-	-	-	-	-	491	491	-	516	516	-
Stage 2	-	-	-	-	-	-	325	532	-	275	509	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1121	-	-	1104	-	-	269	234	741	280	234	751
Stage 1	-	-	-	-	-	-	528	546	-	510	533	-
Stage 2	-	-	-	-	-	-	661	524	-	708	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1096	-	-	1079	-	-	193	214	717	229	214	727
Mov Cap-2 Maneuver	-	-	-	-	-	-	193	214	-	229	214	-
Stage 1	-	-	-	-	-	-	509	527	-	492	504	-
Stage 2	-	-	-	-	-	-	524	496	-	615	517	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	16.3	37.4
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	390	1096	-	-	1079	-	-	280
HCM Lane V/C Ratio	0.185	0.026	-	-	0.045	-	-	0.629
HCM Control Delay (s)	16.3	8.4	-	-	8.5	-	-	37.4
HCM Lane LOS	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	222	60	32	272	60	140	612	77	77	358	55
Future Volume (veh/h)	99	222	60	32	272	60	140	612	77	77	358	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	165	278	88	40	332	85	179	673	104	96	453	64
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.60	0.80	0.68	0.80	0.82	0.71	0.78	0.91	0.74	0.80	0.79	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	1080	331	61	962	242	112	885	137	93	868	122
Arrive On Green	0.08	0.41	0.41	0.03	0.35	0.35	0.06	0.29	0.29	0.05	0.28	0.28
Sat Flow, veh/h	1774	2615	802	1774	2770	696	1774	3056	472	1774	3109	437
Grp Volume(v), veh/h	165	185	181	40	210	207	179	389	388	96	257	260
Grp Sat Flow(s),veh/h/ln	1774	1770	1647	1774	1770	1696	1774	1770	1758	1774	1770	1776
Q Serve(g_s), s	7.5	6.5	6.9	2.1	8.3	8.6	6.0	19.0	19.1	5.0	11.6	11.8
Cycle Q Clear(g_c), s	7.5	6.5	6.9	2.1	8.3	8.6	6.0	19.0	19.1	5.0	11.6	11.8
Prop In Lane	1.00		0.49	1.00		0.41	1.00		0.27	1.00		0.25
Lane Grp Cap(c), veh/h	140	731	680	61	615	589	112	513	509	93	494	496
V/C Ratio(X)	1.18	0.25	0.27	0.66	0.34	0.35	1.60	0.76	0.76	1.03	0.52	0.53
Avail Cap(c_a), veh/h	140	731	680	112	615	589	112	577	574	93	559	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	43.8	18.3	18.4	45.3	23.0	23.0	44.5	30.7	30.8	45.0	28.9	28.9
Incr Delay (d2), s/veh	132.6	0.8	1.0	11.4	1.5	1.6	306.6	5.2	5.3	100.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	3.4	3.3	1.2	4.3	4.3	12.5	10.0	10.0	5.0	5.7	5.9
LnGrp Delay(d),s/veh	176.4	19.1	19.3	56.7	24.5	24.7	351.1	35.9	36.0	145.5	29.7	29.8
LnGrp LOS	F	B	B	E	C	C	F	D	D	F	C	C
Approach Vol, veh/h		531			457			956			613	
Approach Delay, s/veh		68.1			27.4			95.0			47.9	
Approach LOS		E			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	45.2	10.0	32.5	13.5	39.0	9.0	33.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	6.0	33.0	6.0	30.0	6.0	* 33	5.0	31.0
Max Q Clear Time (g_c+I1), s	4.1	8.9	8.0	13.8	9.5	10.6	7.0	21.1
Green Ext Time (p_c), s	0.0	2.2	0.0	5.1	0.0	1.5	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	311	337	309	117	32
Future Volume (veh/h)	31	311	337	309	117	32
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	40	375	392	359	144	40
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.78	0.83	0.86	0.86	0.81	0.80
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	51	2844	2586	1322	191	177
Arrive On Green	0.03	0.80	0.73	0.73	0.11	0.11
Sat Flow, veh/h	1774	3632	3632	1576	1774	1647
Grp Volume(v), veh/h	40	375	392	359	144	40
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1576	1774	1647
Q Serve(g_s), s	2.0	2.1	3.0	4.3	7.1	2.0
Cycle Q Clear(g_c), s	2.0	2.1	3.0	4.3	7.1	2.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	51	2844	2586	1322	191	177
V/C Ratio(X)	0.79	0.13	0.15	0.27	0.76	0.23
Avail Cap(c_a), veh/h	237	2844	2586	1322	690	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	43.5	1.9	3.7	1.5	39.0	36.7
Incr Delay (d2), s/veh	23.4	0.1	0.1	0.5	6.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.0	1.5	3.3	3.8	1.9
LnGrp Delay(d),s/veh	66.9	2.0	3.8	2.0	45.0	37.4
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		415	751		184	
Approach Delay, s/veh		8.3	2.9		43.3	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		76.3		13.7	6.6	69.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		47.0		35.0	12.0	31.0		
Max Q Clear Time (g_c+I1), s		4.1		9.1	4.0	6.3		
Green Ext Time (p_c), s		5.8		0.7	0.0	5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	232	170	139	294	0	346	0	137	0	0	1
Future Volume (vph)	0	232	170	139	294	0	346	0	137	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			4.0
Lane Util. Factor		0.95	1.00	1.00	0.95		0.95	0.95	1.00			1.00
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00	0.97			1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
Frt		1.00	0.85	1.00	1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00	1.00	0.95	1.00		0.95	0.95	1.00			1.00
Satd. Flow (prot)		3539	1387	1770	3539		1625	1681	1440			1826
Flt Permitted		1.00	1.00	0.95	1.00		0.95	0.95	1.00			1.00
Satd. Flow (perm)		3539	1387	1770	3539		1625	1681	1440			1826
Peak-hour factor, PHF	1.00	0.85	0.80	0.81	0.81	1.00	0.92	1.00	0.90	1.00	1.00	0.25
Adj. Flow (vph)	0	273	212	172	363	0	376	0	152	0	0	4
RTOR Reduction (vph)	0	0	73	0	0	0	0	0	124	0	0	4
Lane Group Flow (vph)	0	273	140	172	363	0	188	188	28	0	0	0
Confl. Peds. (#/hr)	5		15			5			8			
Confl. Bikes (#/hr)						1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)		42.5	59.0	13.9	60.4		16.5	16.5	16.5			1.1
Effective Green, g (s)		42.5	59.0	13.9	60.4		16.5	16.5	16.5			1.1
Actuated g/C Ratio		0.47	0.66	0.15	0.67		0.18	0.18	0.18			0.01
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)		1671	909	273	2375		297	308	264			22
v/s Ratio Prot		c0.08	0.03	c0.10	0.10		c0.12	0.11				
v/s Ratio Perm			0.07						0.02			c0.00
v/c Ratio		0.16	0.15	0.63	0.15		0.63	0.61	0.11			0.00
Uniform Delay, d1		13.6	5.9	35.6	5.4		34.0	33.8	30.6			43.9
Progression Factor		1.26	2.24	1.26	0.82		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.2	0.1	4.6	0.1		4.4	3.6	0.2			0.0
Delay (s)		17.3	13.4	49.4	4.6		38.3	37.3	30.8			43.9
Level of Service		B	B	D	A		D	D	C			D
Approach Delay (s)		15.6			19.0			35.8			43.9	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	299	6	12	336	57	34	7	110	46	0	3
Future Volume (veh/h)	36	299	6	12	336	57	34	7	110	46	0	3
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	72	378	16	16	365	127	48	16	128	75	0	4
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.50	0.79	0.38	0.75	0.92	0.45	0.71	0.44	0.86	0.61	1.00	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	1563	66	26	960	329	70	14	560	80	0	560
Arrive On Green	0.19	0.90	0.90	0.01	0.37	0.37	0.36	0.36	0.36	0.36	0.00	0.36
Sat Flow, veh/h	1774	3458	146	1774	2568	879	0	39	1575	0	0	1575
Grp Volume(v), veh/h	72	193	201	16	250	242	64	0	128	75	0	4
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1677	39	0	1575	0	0	1575
Q Serve(g_s), s	3.2	1.2	1.2	0.8	9.3	9.5	0.0	0.0	5.1	0.0	0.0	0.1
Cycle Q Clear(g_c), s	3.2	1.2	1.2	0.8	9.3	9.5	32.0	0.0	5.1	32.0	0.0	0.1
Prop In Lane	1.00		0.08	1.00		0.52	0.75		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	800	829	26	662	627	84	0	560	80	0	560
V/C Ratio(X)	0.44	0.24	0.24	0.62	0.38	0.39	0.76	0.00	0.23	0.94	0.00	0.01
Avail Cap(c_a), veh/h	237	800	829	79	662	627	84	0	560	80	0	560
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	2.4	2.4	44.1	20.5	20.6	38.2	0.0	20.3	45.0	0.0	18.7
Incr Delay (d2), s/veh	1.8	0.7	0.7	14.9	1.1	1.2	33.3	0.0	0.2	79.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.7	0.7	0.5	4.7	4.6	2.4	0.0	2.3	3.6	0.0	0.1
LnGrp Delay(d),s/veh	36.4	3.1	3.1	59.0	21.6	21.8	71.5	0.0	20.5	124.5	0.0	18.7
LnGrp LOS	D	A	A	E	C	C	E		C	F		B
Approach Vol, veh/h		466			508			192			79	
Approach Delay, s/veh		8.3			22.9			37.5			119.2	
Approach LOS		A			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	46.7		38.0	12.3	39.7		38.0
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	38.0		32.0	12.0	30.0		32.0
Max Q Clear Time (g_c+I1), s	2.8	3.2		34.0	5.2	11.5		34.0
Green Ext Time (p_c), s	0.0	3.6		0.0	0.1	3.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	5	21	168	69	34	6	298	12	6	99	23
Future Volume (veh/h)	43	5	21	168	69	34	6	298	12	6	99	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	49	8	32	195	100	40	12	310	36	12	119	36
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.88	0.63	0.66	0.86	0.69	0.85	0.50	0.96	0.33	0.50	0.83	0.64
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	695	105	884	810	708	283	68	402	46	77	335	96
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1044	189	1581	1360	1266	506	25	1669	189	53	1390	396
Grp Volume(v), veh/h	57	0	32	195	0	140	358	0	0	167	0	0
Grp Sat Flow(s),veh/h/ln	1233	0	1581	1360	0	1772	1884	0	0	1839	0	0
Q Serve(g_s), s	0.8	0.0	0.5	4.9	0.0	2.3	2.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.5	8.0	0.0	2.3	10.6	0.0	0.0	4.5	0.0	0.0
Prop In Lane	0.86		1.00	1.00		0.29	0.03		0.10	0.07		0.22
Lane Grp Cap(c), veh/h	801	0	884	810	0	991	516	0	0	507	0	0
V/C Ratio(X)	0.07	0.00	0.04	0.24	0.00	0.14	0.69	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	801	0	884	810	0	991	782	0	0	758	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.77	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	6.0	8.5	0.0	6.3	21.3	0.0	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.7	0.0	0.3	1.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	2.0	0.0	1.2	5.8	0.0	0.0	2.4	0.0	0.0
LnGrp Delay(d),s/veh	6.8	0.0	6.0	9.2	0.0	6.6	22.6	0.0	0.0	19.4	0.0	0.0
LnGrp LOS	A		A	A		A	C			B		
Approach Vol, veh/h		89			335			358			167	
Approach Delay, s/veh		6.5			8.1			22.6			19.4	
Approach LOS		A			A			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		39.5		20.5		39.5		20.5
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		25.0		23.0		25.0		23.0
Max Q Clear Time (g_c+I1), s		5.1		6.5		10.0		12.6
Green Ext Time (p_c), s		1.7		2.0		1.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	0	9	8	0	98	244	2	0	22	1	11
Future Vol, veh/h	0	0	9	8	0	98	244	2	0	22	1	11
Peak Hour Factor	0.92	1.00	0.56	0.50	0.92	0.72	0.87	0.50	0.92	0.79	0.25	0.55
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	16	16	0	136	280	4	0	28	4	20
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.4	11	8.3
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	65%	0%	28%	0%
Vol Thru, %	3%	53%	71%	67%
Vol Right, %	32%	47%	1%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	17	344	3
LT Vol	22	0	98	0
Through Vol	1	9	244	2
RT Vol	11	8	2	1
Lane Flow Rate	52	32	421	8
Geometry Grp	1	1	1	1
Degree of Util (X)	0.07	0.038	0.481	0.011
Departure Headway (Hd)	4.881	4.218	4.116	4.806
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	852	866	748
Service Time	2.885	2.226	2.179	2.812
HCM Lane V/C Ratio	0.07	0.038	0.486	0.011
HCM Control Delay	8.3	7.4	11	7.9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.2	0.1	2.7	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	2	1
Future Vol, veh/h	0	0	2	1
Peak Hour Factor	0.92	1.00	0.50	0.25
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	4	4
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.9
HCM LOS	A

Lane

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	55	72	5	0	27	195	34	0	221	92	16
Future Vol, veh/h	0	55	72	5	0	27	195	34	0	221	92	16
Peak Hour Factor	0.92	0.63	0.82	0.42	0.92	0.68	0.84	0.71	0.92	0.97	0.68	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	87	88	12	0	40	232	48	0	228	135	24
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	1
HCM Control Delay	13.5	17.5	13.5
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	42%	11%	24%	0%
Vol Thru, %	0%	100%	0%	55%	76%	76%	0%
Vol Right, %	0%	0%	100%	4%	13%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	221	92	16	132	256	76	17
LT Vol	221	0	0	55	27	18	0
Through Vol	0	92	0	72	195	58	0
RT Vol	0	0	16	5	34	0	17
Lane Flow Rate	228	135	24	187	320	108	24
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.443	0.244	0.038	0.358	0.571	0.231	0.045
Departure Headway (Hd)	6.999	6.489	5.774	6.899	6.434	7.682	6.838
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	510	549	615	518	556	470	527
Service Time	4.786	4.275	3.56	4.697	4.219	5.382	4.538
HCM Lane V/C Ratio	0.447	0.246	0.039	0.361	0.576	0.23	0.046
HCM Control Delay	15.3	11.4	8.8	13.5	17.5	12.7	9.9
HCM Lane LOS	C	B	A	B	C	B	A
HCM 95th-tile Q	2.2	1	0.1	1.6	3.6	0.9	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	18	58	17
Future Vol, veh/h	0	18	58	17
Peak Hour Factor	0.92	0.75	0.69	0.71
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	24	84	24
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	12.2
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	18	0	348	0	0	0	0	616	457	174	521	0
Future Vol, veh/h	18	0	348	0	0	0	0	616	457	174	521	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	300	-	0	-	-	-	-	-	90	175	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	100	95	100	100	100	100	87	88	81	82	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	0	366	0	0	0	0	708	519	215	635	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1419	1773	635	635	0	0	708	0	0
Stage 1	1065	1065	-	-	-	-	-	-	-
Stage 2	354	708	-	-	-	-	-	-	-
Critical Hdwy	6.63	6.53	6.23	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.83	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	2.218	-	-	2.22	-	-
Pot Cap-1 Maneuver	139	83	478	948	-	-	887	-	-
Stage 1	330	298	-	-	-	-	-	-	-
Stage 2	682	437	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	105	0	478	948	-	-	887	-	-
Mov Cap-2 Maneuver	105	0	-	-	-	-	-	-	-
Stage 1	250	0	-	-	-	-	-	-	-
Stage 2	682	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.2	0	2.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	948	-	-	105	478	887	-	-
HCM Lane V/C Ratio	-	-	-	0.229	0.766	0.242	-	-
HCM Control Delay (s)	0	-	-	49.2	33.2	10.4	-	-
HCM Lane LOS	A	-	-	E	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	6.7	0.9	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	26	457	4	42	1	669	62	10	0	20	369
Future Volume (vph)	80	26	457	4	42	1	669	62	10	0	20	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	16	12	14	12	12	16	12	12	10	10
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lane Util. Factor		1.00	0.88		1.00		0.97	1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97			1.00	0.85
Flt Protected		0.97	1.00		0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)		2038	3100		1962		3433	2047			1739	1440
Flt Permitted		0.97	1.00		0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)		2038	3100		1962		3433	2047			1739	1440
Peak-hour factor, PHF	0.77	0.65	0.88	0.50	0.66	0.25	0.89	0.67	0.50	1.00	0.63	0.93
Adj. Flow (vph)	104	40	519	8	64	4	752	93	20	0	32	397
RTOR Reduction (vph)	0	0	190	0	3	0	0	10	0	0	0	356
Lane Group Flow (vph)	0	144	329	0	73	0	752	103	0	0	32	41
Confl. Peds. (#/hr)			4									8
Confl. Bikes (#/hr)									1			
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA			NA	Perm
Protected Phases	2	2	3	1	1		3	8			4	
Permitted Phases			2							4		4
Actuated Green, G (s)		33.6	57.0		7.6		23.4	36.8			9.4	9.4
Effective Green, g (s)		33.6	57.0		7.6		23.4	36.8			9.4	9.4
Actuated g/C Ratio		0.37	0.63		0.08		0.26	0.41			0.10	0.10
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		760	2101		165		892	836			181	150
v/s Ratio Prot		c0.07	0.04		c0.04		c0.22	0.05			0.02	
v/s Ratio Perm			0.07									c0.03
v/c Ratio		0.19	0.16		0.44		0.84	0.12			0.18	0.28
Uniform Delay, d1		19.0	6.7		39.2		31.6	16.6			36.8	37.2
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		0.6	0.0		1.9		7.3	0.1			0.5	1.0
Delay (s)		19.6	6.8		41.1		38.9	16.6			37.2	38.2
Level of Service		B	A		D		D	B			D	D
Approach Delay (s)		9.5			41.1			36.0			38.1	
Approach LOS		A			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
Description: Lemon Grove Ave/North Ave			

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	13	117	779	30	50	369
Future Vol, veh/h	13	117	779	30	50	369
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	54	79	85	75	69	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	148	916	40	72	479

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1321	514	0	0	956	0
Stage 1	936	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	148	505	-	-	715	-
Stage 1	342	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	123	490	-	-	694	-
Mov Cap-2 Maneuver	123	-	-	-	-	-
Stage 1	342	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	1.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	346	694	-
HCM Lane V/C Ratio	-	-	0.498	0.104	-
HCM Control Delay (s)	-	-	25.3	10.8	0.6
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	2.6	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	79	99	28	112	28	170	750	7	8	283	32
Future Volume (veh/h)	77	79	99	28	112	28	170	750	7	8	283	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	100	155	129	36	175	48	212	882	24	16	368	40
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.77	0.51	0.77	0.78	0.64	0.58	0.80	0.85	0.29	0.50	0.77	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	209	158	88	372	94	252	1813	49	26	1246	135
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.14	0.52	0.52	0.01	0.39	0.39
Sat Flow, veh/h	353	715	540	146	1274	323	1774	3516	96	1774	3214	347
Grp Volume(v), veh/h	384	0	0	259	0	0	212	444	462	16	201	207
Grp Sat Flow(s),veh/h/ln	1607	0	0	1743	0	0	1774	1770	1842	1774	1770	1791
Q Serve(g_s), s	9.4	0.0	0.0	0.0	0.0	0.0	10.5	14.6	14.6	0.8	7.1	7.2
Cycle Q Clear(g_c), s	19.8	0.0	0.0	10.4	0.0	0.0	10.5	14.6	14.6	0.8	7.1	7.2
Prop In Lane	0.26		0.34	0.14		0.19	1.00		0.05	1.00		0.19
Lane Grp Cap(c), veh/h	520	0	0	555	0	0	252	912	950	26	686	695
V/C Ratio(X)	0.74	0.00	0.00	0.47	0.00	0.00	0.84	0.49	0.49	0.62	0.29	0.30
Avail Cap(c_a), veh/h	602	0	0	643	0	0	375	912	950	79	686	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	26.2	0.0	0.0	37.6	14.1	14.1	44.1	19.0	19.1
Incr Delay (d2), s/veh	4.1	0.0	0.0	0.6	0.0	0.0	10.4	1.9	1.8	21.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	0.0	5.4	0.0	0.0	5.9	7.5	7.8	0.5	3.7	3.8
LnGrp Delay(d),s/veh	33.4	0.0	0.0	26.8	0.0	0.0	48.0	16.0	15.9	65.4	20.1	20.2
LnGrp LOS	C			C			D	B	B	E	C	C
Approach Vol, veh/h		384			259			1118			424	
Approach Delay, s/veh		33.4			26.8			22.0			21.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	52.4		32.3	16.8	40.9		32.3
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	39.0		31.0	19.0	24.0		31.0
Max Q Clear Time (g_c+I1), s	2.8	16.6		21.8	12.5	9.2		12.4
Green Ext Time (p_c), s	0.0	5.7		2.1	0.4	5.0		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	14	90	837	69	67	343
Future Vol, veh/h	14	90	837	69	67	343
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	58	80	85	51	84	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	113	985	135	80	413

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1418	571	0	0	1120	0
Stage 1	1052	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	128	464	-	-	619	-
Stage 1	297	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	460	-	-	613	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	297	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.4	0	1.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	294	613	-
HCM Lane V/C Ratio	-	-	0.465	0.13	-
HCM Control Delay (s)	-	-	27.4	11.7	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	2.3	0.4	-

Intersection	
Int Delay, s/veh	10.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	47	17	37	2	19	54	37	503	4	27	193	51
Future Vol, veh/h	47	17	37	2	19	54	37	503	4	27	193	51
Conflicting Peds, #/hr	3	0	12	12	0	3	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	61	62	25	59	71	58	91	100	56	74	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	28	60	8	32	76	64	553	4	48	261	88

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1115	1061	276	1105	1061	568	273	0	0	565	0	0
Stage 1	369	369	-	692	692	-	-	-	-	-	-	-
Stage 2	746	692	-	413	369	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	185	224	763	188	224	522	1290	-	-	1007	-	-
Stage 1	651	621	-	434	445	-	-	-	-	-	-	-
Stage 2	405	445	-	616	621	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	126	197	751	141	197	514	1287	-	-	1004	-	-
Mov Cap-2 Maneuver	126	197	-	141	197	-	-	-	-	-	-	-
Stage 1	610	583	-	407	417	-	-	-	-	-	-	-
Stage 2	302	417	-	513	583	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.7	22.9	0.8	1.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1287	-	-	204	316	1004	-	-
HCM Lane V/C Ratio	0.05	-	-	0.763	0.368	0.048	-	-
HCM Control Delay (s)	7.9	-	-	63.7	22.9	8.8	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.2	1.6	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	3	11	507	2	14	218
Future Vol, veh/h	3	11	507	2	14	218
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	38	92	91	50	88	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	557	4	16	295

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	885	567	0	0	561	0
Stage 1	559	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	315	523	-	-	1010	-
Stage 1	572	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	307	519	-	-	1002	-
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	478	1002	-
HCM Lane V/C Ratio	-	-	0.042	0.016	-
HCM Control Delay (s)	-	-	12.9	8.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	30.8
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	13	25	64	0	9	73	18	0	208	472	8
Future Vol, veh/h	0	13	25	64	0	9	73	18	0	208	472	8
Peak Hour Factor	0.92	0.81	0.57	0.57	0.92	0.32	0.65	0.75	0.92	0.60	0.88	0.40
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	44	112	0	28	112	24	0	347	536	20
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	1
HCM Control Delay	13.3	13.6	41.8
HCM LOS	B	B	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	13%	9%	100%	0%
Vol Thru, %	0%	98%	25%	73%	0%	72%
Vol Right, %	0%	2%	63%	18%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	208	480	102	100	12	208
LT Vol	208	0	13	9	12	0
Through Vol	0	472	25	73	0	150
RT Vol	0	8	64	18	0	58
Lane Flow Rate	347	556	172	164	24	288
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.651	0.965	0.329	0.327	0.051	0.557
Departure Headway (Hd)	6.891	6.369	6.878	7.15	7.674	6.961
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	527	573	523	505	468	521
Service Time	4.591	4.069	4.906	5.178	5.395	4.682
HCM Lane V/C Ratio	0.658	0.97	0.329	0.325	0.051	0.553
HCM Control Delay	21.5	54.4	13.3	13.6	10.8	18.1
HCM Lane LOS	C	F	B	B	B	C
HCM 95th-tile Q	4.6	13.1	1.4	1.4	0.2	3.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	12	150	58
Future Vol, veh/h	0	12	150	58
Peak Hour Factor	0.92	0.50	0.75	0.66
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	24	200	88
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	17.5
HCM LOS	C

Lane

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	8	22	12	0	7	27	17	0	35	83	3
Future Vol, veh/h	0	8	22	12	0	7	27	17	0	35	83	3
Peak Hour Factor	0.92	0.67	0.61	0.50	0.92	0.44	0.75	0.85	0.92	0.73	0.83	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	36	24	0	16	36	20	0	48	100	4
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	7.6	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	29%	19%	14%
Vol Thru, %	69%	52%	53%
Vol Right, %	2%	29%	33%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	121	42	51
LT Vol	35	8	7
Through Vol	83	22	27
RT Vol	3	12	17
Lane Flow Rate	152	72	72
Geometry Grp	1	1	1
Degree of Util (X)	0.178	0.085	0.084
Departure Headway (Hd)	4.224	4.226	4.186
Convergence, Y/N	Yes	Yes	Yes
Cap	839	853	861
Service Time	2.302	2.228	2.189
HCM Lane V/C Ratio	0.181	0.084	0.084
HCM Control Delay	8.2	7.6	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.3	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	0	0
Future Vol, veh/h	0	0	0	0
Peak Hour Factor	0.92	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	0	0
Number of Lanes	0	0	0	0

Approach	
Opposing Approach	
Opposing Lanes	
Conflicting Approach Left	
Conflicting Lanes Left	
Conflicting Approach Right	
Conflicting Lanes Right	
HCM Control Delay	
HCM LOS	

Lane

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	14	5	9	3	6	22	9	314	3	4	145	13
Future Vol, veh/h	14	5	9	3	6	22	9	314	3	4	145	13
Conflicting Peds, #/hr	5	0	3	3	0	5	3	0	19	19	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	42	56	75	75	79	56	79	38	33	77	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	12	16	4	8	28	16	397	8	12	188	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	682	669	220	679	673	425	209	0	0	410	0	0
Stage 1	226	226	-	439	439	-	-	-	-	-	-	-
Stage 2	456	443	-	240	234	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	364	379	820	366	377	629	1362	-	-	1149	-	-
Stage 1	777	717	-	597	578	-	-	-	-	-	-	-
Stage 2	584	576	-	763	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	326	365	799	334	363	612	1335	-	-	1125	-	-
Mov Cap-2 Maneuver	326	365	-	334	363	-	-	-	-	-	-	-
Stage 1	761	704	-	585	566	-	-	-	-	-	-	-
Stage 2	530	564	-	712	699	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.6	12.8	0.3	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1335	-	-	421	501	1125	-	-
HCM Lane V/C Ratio	0.012	-	-	0.114	0.08	0.011	-	-
HCM Control Delay (s)	7.7	0	-	14.6	12.8	8.2	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	16	95	4	0	14	146	53	0	17	90	30
Future Vol, veh/h	0	16	95	4	0	14	146	53	0	17	90	30
Peak Hour Factor	0.92	0.67	0.79	0.50	0.92	0.70	0.91	0.88	0.92	0.61	0.87	0.68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	120	8	0	20	160	60	0	28	103	44
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	9.4	10	9.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	14%	7%	21%
Vol Thru, %	66%	83%	69%	65%
Vol Right, %	22%	3%	25%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	115	213	91
LT Vol	17	16	14	19
Through Vol	90	95	146	59
RT Vol	30	4	53	13
Lane Flow Rate	175	152	241	128
Geometry Grp	1	1	1	1
Degree of Util (X)	0.241	0.211	0.317	0.18
Departure Headway (Hd)	4.939	4.991	4.742	5.065
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	712	751	701
Service Time	3.018	3.072	2.815	3.15
HCM Lane V/C Ratio	0.243	0.213	0.321	0.183
HCM Control Delay	9.6	9.4	10	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.8	1.4	0.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	19	59	13
Future Vol, veh/h	0	19	59	13
Peak Hour Factor	0.92	0.68	0.74	0.65
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	28	80	20
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.3
HCM LOS	A

Lane

Intersection	
Intersection Delay, s/veh	23.5
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	19	132	4	0	21	192	116	0	15	197	37
Future Vol, veh/h	0	19	132	4	0	21	192	116	0	15	197	37
Peak Hour Factor	0.92	0.68	0.70	0.50	0.92	0.48	0.75	0.74	0.92	0.63	0.74	0.54
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	28	189	8	0	44	256	157	0	24	266	69
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	16.1	30.9	23.3
HCM LOS	C	D	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	12%	6%	35%
Vol Thru, %	79%	85%	58%	55%
Vol Right, %	15%	3%	35%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	249	155	329	167
LT Vol	15	19	21	58
Through Vol	197	132	192	92
RT Vol	37	4	116	17
Lane Flow Rate	359	225	457	228
Geometry Grp	1	1	1	1
Degree of Util (X)	0.681	0.451	0.804	0.461
Departure Headway (Hd)	6.834	7.235	6.489	7.293
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	531	498	562	494
Service Time	4.862	5.278	4.489	5.33
HCM Lane V/C Ratio	0.676	0.452	0.813	0.462
HCM Control Delay	23.3	16.1	30.9	16.4
HCM Lane LOS	C	C	D	C
HCM 95th-tile Q	5.1	2.3	7.8	2.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	58	92	17
Future Vol, veh/h	0	58	92	17
Peak Hour Factor	0.92	0.73	0.74	0.71
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	79	124	24
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	16.4
HCM LOS	C

Lane

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

02/01/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	84	76	119	55	362	30	506	529	319	656	102
Future Volume (veh/h)	92	84	76	119	55	362	30	506	529	319	656	102
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	112	104	88	143	0	487	48	575	551	347	669	109
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.82	0.81	0.86	0.83	0.72	0.83	0.63	0.88	0.96	0.92	0.98	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	129	109	233	0	432	132	549	480	366	1349	220
Arrive On Green	0.21	0.21	0.21	0.13	0.00	0.13	0.07	0.31	0.31	0.21	0.44	0.44
Sat Flow, veh/h	667	619	524	1774	0	3293	1774	1770	1546	1774	3049	496
Grp Volume(v), veh/h	304	0	0	143	0	487	48	575	551	347	388	390
Grp Sat Flow(s),veh/h/ln	1810	0	0	1774	0	1647	1774	1770	1546	1774	1770	1775
Q Serve(g_s), s	20.0	0.0	0.0	9.5	0.0	16.4	3.2	38.8	38.8	24.1	19.6	19.6
Cycle Q Clear(g_c), s	20.0	0.0	0.0	9.5	0.0	16.4	3.2	38.8	38.8	24.1	19.6	19.6
Prop In Lane	0.37		0.29	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	376	0	0	233	0	432	132	549	480	366	783	785
V/C Ratio(X)	0.81	0.00	0.00	0.61	0.00	1.13	0.36	1.05	1.15	0.95	0.50	0.50
Avail Cap(c_a), veh/h	376	0	0	233	0	432	132	549	480	366	783	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.37	0.37	0.37	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	0.0	0.0	51.3	0.0	54.3	55.0	43.1	43.1	48.9	24.9	24.9
Incr Delay (d2), s/veh	16.8	0.0	0.0	11.6	0.0	82.7	0.2	36.5	76.2	33.3	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	0.0	5.4	0.0	12.4	1.6	24.5	26.7	15.2	10.0	10.1
LnGrp Delay(d),s/veh	63.9	0.0	0.0	62.9	0.0	137.0	55.3	79.6	119.3	82.2	27.1	27.1
LnGrp LOS	E			E		F	E	F	F	F	C	C
Approach Vol, veh/h		304			630			1174			1125	
Approach Delay, s/veh		63.9			120.2			97.2			44.1	
Approach LOS		E			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.0	43.4		30.6	13.5	59.9		21.0
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	25.8	* 39		26.0	9.3	* 55		16.4
Max Q Clear Time (g_c+I1), s	26.1	40.8		22.0	5.2	21.6		18.4
Green Ext Time (p_c), s	0.0	0.0		0.3	0.4	1.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.1
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	576	644	273	76	379	189	184	460	46	302	452	80
Future Volume (veh/h)	576	644	273	76	379	189	184	460	46	302	452	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	647	805	303	96	412	230	233	505	60	355	486	104
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.89	0.80	0.90	0.79	0.92	0.82	0.79	0.91	0.77	0.85	0.93	0.77
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	590	1349	598	122	910	403	203	785	93	328	658	140
Arrive On Green	0.17	0.38	0.38	0.07	0.26	0.26	0.11	0.25	0.25	0.10	0.23	0.23
Sat Flow, veh/h	3442	3539	1568	1845	3539	1567	1774	3180	376	3442	2890	614
Grp Volume(v), veh/h	647	805	303	96	412	230	233	280	285	355	296	294
Grp Sat Flow(s),veh/h/ln	1721	1770	1568	1845	1770	1567	1774	1770	1787	1721	1770	1735
Q Serve(g_s), s	18.0	19.1	15.6	5.4	10.3	13.4	12.0	14.9	15.0	10.0	16.3	16.5
Cycle Q Clear(g_c), s	18.0	19.1	15.6	5.4	10.3	13.4	12.0	14.9	15.0	10.0	16.3	16.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.35
Lane Grp Cap(c), veh/h	590	1349	598	122	910	403	203	437	441	328	403	395
V/C Ratio(X)	1.10	0.60	0.51	0.78	0.45	0.57	1.15	0.64	0.65	1.08	0.74	0.74
Avail Cap(c_a), veh/h	590	1349	598	176	910	403	203	506	511	328	472	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.98	0.98	0.98	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	43.5	26.0	24.9	48.3	32.8	34.0	46.5	35.4	35.4	47.5	37.6	37.7
Incr Delay (d2), s/veh	66.1	1.9	3.0	8.0	1.6	5.6	109.2	2.2	2.3	70.0	4.3	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	9.6	7.2	3.0	5.2	6.4	12.0	7.5	7.6	7.9	8.5	8.4
LnGrp Delay(d),s/veh	109.6	28.0	27.9	56.3	34.4	39.6	155.7	37.6	37.7	117.5	41.9	42.3
LnGrp LOS	F	C	C	E	C	D	F	D	D	F	D	D
Approach Vol, veh/h		1755			738			798			945	
Approach Delay, s/veh		58.0			38.9			72.1			70.4	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	46.0	16.0	29.9	24.0	33.0	14.0	31.9
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	10.0	35.0	12.0	28.0	18.0	* 27	10.0	30.0
Max Q Clear Time (g_c+I1), s	7.4	21.1	14.0	18.5	20.0	15.4	12.0	17.0
Green Ext Time (p_c), s	0.0	6.4	0.0	3.4	0.0	2.3	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	60.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	127	62	83	53	75	32	552	61	79	700	42
Future Volume (veh/h)	44	127	62	83	53	75	32	552	61	79	700	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	64	157	87	104	56	80	40	634	84	84	714	68
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.69	0.81	0.71	0.80	0.95	0.94	0.80	0.87	0.73	0.94	0.98	0.62
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	388	197	289	160	196	50	750	632	108	810	683
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.02	0.27	0.27	0.06	0.43	0.43
Sat Flow, veh/h	281	962	489	574	397	486	1774	1863	1570	1774	1863	1571
Grp Volume(v), veh/h	308	0	0	240	0	0	40	634	84	84	714	68
Grp Sat Flow(s),veh/h/ln	1732	0	0	1457	0	0	1774	1863	1570	1774	1863	1571
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.0	2.0	29.0	3.6	4.2	31.6	2.3
Cycle Q Clear(g_c), s	10.7	0.0	0.0	10.3	0.0	0.0	2.0	29.0	3.6	4.2	31.6	2.3
Prop In Lane	0.21		0.28	0.43		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	0	0	645	0	0	50	750	632	108	810	683
V/C Ratio(X)	0.41	0.00	0.00	0.37	0.00	0.00	0.80	0.85	0.13	0.78	0.88	0.10
Avail Cap(c_a), veh/h	747	0	0	645	0	0	79	869	732	158	952	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	0.0	18.9	0.0	0.0	43.9	30.2	21.0	41.7	23.3	15.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	1.6	0.0	0.0	2.8	0.7	0.0	13.8	8.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.0	4.5	0.0	0.0	1.0	15.0	1.6	2.5	18.0	1.0
LnGrp Delay(d),s/veh	20.9	0.0	0.0	20.5	0.0	0.0	46.7	30.9	21.0	55.5	31.9	15.1
LnGrp LOS	C			C			D	C	C	E	C	B
Approach Vol, veh/h		308			240			758			866	
Approach Delay, s/veh		20.9			20.5			30.6			32.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	40.2		40.3	6.5	43.1		40.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	42.0		28.0	4.0	46.0		28.0
Max Q Clear Time (g_c+I1), s	6.2	31.0		12.7	4.0	33.6		12.3
Green Ext Time (p_c), s	0.0	5.2		2.2	0.0	5.5		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	108	679	495	7	135	98
Future Volume (veh/h)	108	679	495	7	135	98
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	140	746	532	20	142	142
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.77	0.91	0.93	0.35	0.94	0.70
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	179	2808	2265	85	209	190
Arrive On Green	0.10	0.79	0.87	0.87	0.12	0.12
Sat Flow, veh/h	1845	3632	3567	130	1774	1615
Grp Volume(v), veh/h	140	746	271	281	142	142
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1835	1774	1615
Q Serve(g_s), s	6.7	5.0	2.3	2.3	6.9	7.7
Cycle Q Clear(g_c), s	6.7	5.0	2.3	2.3	6.9	7.7
Prop In Lane	1.00			0.07	1.00	1.00
Lane Grp Cap(c), veh/h	179	2808	1154	1196	209	190
V/C Ratio(X)	0.78	0.27	0.23	0.24	0.68	0.75
Avail Cap(c_a), veh/h	431	2808	1154	1196	453	413
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	39.7	2.4	2.2	2.2	38.1	38.4
Incr Delay (d2), s/veh	4.3	0.1	0.5	0.5	3.9	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	2.4	1.2	1.3	3.6	3.7
LnGrp Delay(d),s/veh	44.0	2.6	2.7	2.7	41.9	44.2
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		886	552		284	
Approach Delay, s/veh		9.1	2.7		43.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.4		14.6	12.7	62.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		59.0		23.0	21.0	34.0		
Max Q Clear Time (g_c+I1), s		7.0		9.7	8.7	4.3		
Green Ext Time (p_c), s		6.8		0.9	0.3	6.5		

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	656	102	27	411	14	71	31	26	53	30	57
Future Volume (veh/h)	68	656	102	27	411	14	71	31	26	53	30	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	76	721	120	44	495	20	88	48	40	68	44	72
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.90	0.91	0.85	0.61	0.83	0.70	0.81	0.65	0.65	0.78	0.68	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1934	322	57	2134	86	154	83	52	207	119	305
Arrive On Green	0.11	1.00	1.00	0.06	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1845	3022	503	1845	3462	140	479	423	265	726	606	1552
Grp Volume(v), veh/h	76	422	419	44	253	262	176	0	0	112	0	72
Grp Sat Flow(s),veh/h/ln	1845	1770	1755	1845	1770	1832	1168	0	0	1332	0	1552
Q Serve(g_s), s	3.6	0.0	0.0	2.1	0.0	0.0	7.6	0.0	0.0	0.0	0.0	3.5
Cycle Q Clear(g_c), s	3.6	0.0	0.0	2.1	0.0	0.0	14.1	0.0	0.0	6.5	0.0	3.5
Prop In Lane	1.00		0.29	1.00		0.08	0.50		0.23	0.61		1.00
Lane Grp Cap(c), veh/h	99	1132	1123	57	1091	1129	289	0	0	326	0	305
V/C Ratio(X)	0.76	0.37	0.37	0.78	0.23	0.23	0.61	0.00	0.00	0.34	0.00	0.24
Avail Cap(c_a), veh/h	267	1132	1123	164	1091	1129	446	0	0	479	0	466
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	0.0	41.9	0.0	0.0	35.7	0.0	0.0	31.5	0.0	30.5
Incr Delay (d2), s/veh	10.8	0.9	0.9	19.4	0.5	0.5	2.1	0.0	0.0	0.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.3	0.3	1.4	0.1	0.1	4.4	0.0	0.0	2.5	0.0	1.5
LnGrp Delay(d),s/veh	50.4	0.9	0.9	61.3	0.5	0.5	37.7	0.0	0.0	32.1	0.0	30.9
LnGrp LOS	D	A	A	E	A	A	D			C		C
Approach Vol, veh/h		917			559			176			184	
Approach Delay, s/veh		5.0			5.3			37.7			31.6	
Approach LOS		A			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	61.6		21.7	8.8	59.5		21.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	43.0		27.0	13.0	38.0		27.0
Max Q Clear Time (g_c+I1), s	4.1	2.0		8.5	5.6	2.0		16.1
Green Ext Time (p_c), s	0.0	6.6		2.0	0.1	6.5		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	558	53	37	348	73	60	180	24	129	207	47
Future Volume (veh/h)	42	558	53	37	348	73	60	180	24	129	207	47
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	52	607	68	52	378	84	68	205	32	143	244	52
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.81	0.92	0.78	0.71	0.92	0.87	0.88	0.88	0.75	0.90	0.85	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1614	180	67	1439	315	88	283	234	180	324	69
Arrive On Green	0.07	1.00	1.00	0.04	0.50	0.50	0.05	0.15	0.15	0.10	0.21	0.21
Sat Flow, veh/h	1845	3197	357	1845	2851	624	1774	1863	1543	1774	1548	330
Grp Volume(v), veh/h	52	335	340	52	233	229	68	205	32	143	0	296
Grp Sat Flow(s),veh/h/ln	1845	1770	1784	1845	1770	1705	1774	1863	1543	1774	0	1878
Q Serve(g_s), s	2.5	0.0	0.0	2.5	6.7	6.9	3.4	9.4	1.6	7.1	0.0	13.3
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	6.7	6.9	3.4	9.4	1.6	7.1	0.0	13.3
Prop In Lane	1.00		0.20	1.00		0.37	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	67	893	901	67	894	861	88	283	234	180	0	393
V/C Ratio(X)	0.77	0.38	0.38	0.77	0.26	0.27	0.78	0.72	0.14	0.80	0.00	0.75
Avail Cap(c_a), veh/h	123	893	901	123	894	861	177	373	309	345	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.00	0.90
Uniform Delay (d), s/veh	41.4	0.0	0.0	43.0	12.7	12.7	42.3	36.4	33.1	39.5	0.0	33.4
Incr Delay (d2), s/veh	16.0	1.1	1.1	16.7	0.7	0.8	13.5	4.8	0.3	7.1	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.3	0.3	1.6	3.5	3.4	2.0	5.2	0.7	3.8	0.0	7.2
LnGrp Delay(d),s/veh	57.4	1.1	1.1	59.7	13.4	13.5	55.8	41.1	33.3	46.6	0.0	36.5
LnGrp LOS	E	A	A	E	B	B	E	D	C	D		D
Approach Vol, veh/h		727			514			305			439	
Approach Delay, s/veh		5.2			18.1			43.6			39.8	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	51.4	8.5	22.8	7.3	51.4	13.6	17.7
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	6.0	30.0	9.0	27.0	6.0	30.0	17.5	18.0
Max Q Clear Time (g_c+I1), s	4.5	2.0	5.4	15.3	4.5	8.9	9.1	11.4
Green Ext Time (p_c), s	0.0	5.0	0.0	2.5	0.0	4.8	0.3	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	23.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	23	624	41	51	394	24	12	10	31	41	56	64
Future Vol, veh/h	23	624	41	51	394	24	12	10	31	41	56	64
Conflicting Peds, #/hr	37	0	6	6	0	37	8	0	6	6	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	180	-	-	110	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	92	68	71	94	75	75	63	60	79	74	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	678	60	72	419	32	16	16	52	52	76	96

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	747	0	0	1172	1376	414	998	1390	271
Stage 1	-	-	-	-	-	-	773	773	-	587	587	-
Stage 2	-	-	-	-	-	-	399	603	-	411	803	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1098	-	-	857	-	-	148	144	587	198	141	727
Stage 1	-	-	-	-	-	-	358	407	-	463	495	-
Stage 2	-	-	-	-	-	-	598	487	-	589	394	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1064	-	-	831	-	-	58	126	564	143	123	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	126	-	143	123	-
Stage 1	-	-	-	-	-	-	345	393	-	447	448	-
Stage 2	-	-	-	-	-	-	380	441	-	485	380	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.3	45.5	147.5
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	169	1064	-	-	831	-	-	200
HCM Lane V/C Ratio	0.494	0.026	-	-	0.086	-	-	1.115
HCM Control Delay (s)	45.5	8.5	-	-	9.7	-	-	147.5
HCM Lane LOS	E	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	2.4	0.1	-	-	0.3	-	-	10.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	451	106	75	293	70	129	436	75	96	652	68
Future Volume (veh/h)	127	451	106	75	293	70	129	436	75	96	652	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.92	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	165	564	120	91	315	104	140	559	119	108	767	92
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.77	0.80	0.88	0.82	0.93	0.67	0.92	0.78	0.63	0.89	0.85	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	1579	334	117	840	270	112	895	190	93	954	114
Arrive On Green	0.27	0.55	0.55	0.07	0.33	0.33	0.06	0.31	0.31	0.05	0.30	0.30
Sat Flow, veh/h	1774	2871	608	1774	2575	827	1774	2878	610	1774	3175	381
Grp Volume(v), veh/h	165	347	337	91	214	205	140	343	335	108	427	432
Grp Sat Flow(s),veh/h/ln	1774	1770	1709	1774	1770	1632	1774	1770	1719	1774	1770	1786
Q Serve(g_s), s	7.1	10.4	10.5	4.8	8.8	9.2	6.0	15.7	15.9	5.0	21.2	21.2
Cycle Q Clear(g_c), s	7.1	10.4	10.5	4.8	8.8	9.2	6.0	15.7	15.9	5.0	21.2	21.2
Prop In Lane	1.00		0.36	1.00		0.51	1.00		0.35	1.00		0.21
Lane Grp Cap(c), veh/h	476	973	940	117	577	533	112	550	534	93	532	537
V/C Ratio(X)	0.35	0.36	0.36	0.78	0.37	0.39	1.25	0.62	0.63	1.16	0.80	0.80
Avail Cap(c_a), veh/h	476	973	940	187	577	533	112	577	561	93	559	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	28.0	12.0	12.0	43.7	24.5	24.7	44.5	28.0	28.0	45.0	30.6	30.7
Incr Delay (d2), s/veh	0.4	1.0	1.1	10.7	1.8	2.1	166.5	1.9	2.1	138.9	7.6	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.3	5.2	2.7	4.6	4.5	8.1	7.9	7.9	6.0	11.5	11.6
LnGrp Delay(d),s/veh	28.5	13.0	13.1	54.4	26.3	26.8	211.0	29.9	30.1	183.9	38.3	38.2
LnGrp LOS	C	B	B	D	C	C	F	C	C	F	D	D
Approach Vol, veh/h		849			510			818			967	
Approach Delay, s/veh		16.0			31.5			61.0			54.5	
Approach LOS		B			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	58.8	10.0	34.5	32.0	37.0	9.0	35.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	10.0	29.0	6.0	30.0	8.0	* 31	5.0	31.0
Max Q Clear Time (g_c+I1), s	6.8	12.5	8.0	23.2	9.1	11.2	7.0	17.9
Green Ext Time (p_c), s	0.1	3.4	0.0	3.7	0.0	1.5	0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	578	373	175	248	60
Future Volume (veh/h)	38	578	373	175	248	60
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	52	635	397	219	288	72
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.73	0.91	0.94	0.80	0.86	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	67	2538	2247	1307	344	320
Arrive On Green	0.04	0.72	0.63	0.63	0.19	0.19
Sat Flow, veh/h	1774	3632	3632	1575	1774	1647
Grp Volume(v), veh/h	52	635	397	219	288	72
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1575	1774	1647
Q Serve(g_s), s	2.6	5.6	4.2	2.5	14.1	3.3
Cycle Q Clear(g_c), s	2.6	5.6	4.2	2.5	14.1	3.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	67	2538	2247	1307	344	320
V/C Ratio(X)	0.78	0.25	0.18	0.17	0.84	0.23
Avail Cap(c_a), veh/h	217	2538	2247	1307	749	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	42.9	4.4	6.8	1.5	34.9	30.6
Incr Delay (d2), s/veh	17.4	0.2	0.2	0.3	5.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	2.0	2.4	7.4	3.3
LnGrp Delay(d),s/veh	60.3	4.6	6.9	1.8	40.3	30.9
LnGrp LOS	E	A	A	A	D	C
Approach Vol, veh/h		687	616		360	
Approach Delay, s/veh		8.8	5.1		38.4	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		68.5		21.5	7.4	61.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		44.0		38.0	11.0	29.0		
Max Q Clear Time (g_c+I1), s		7.6		16.1	4.6	6.2		
Green Ext Time (p_c), s		6.5		1.4	0.0	6.0		

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	417	400	167	254	0	286	0	129	0	0	0
Future Volume (vph)	1	417	400	167	254	0	286	0	129	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98			
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (prot)	1683	3539	1404	1770	3539		1625	1681	1449			
Flt Permitted	0.57	1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (perm)	1016	3539	1404	1770	3539		1625	1681	1449			
Peak-hour factor, PHF	0.25	0.94	0.90	0.77	0.87	1.00	0.77	1.00	0.83	1.00	1.00	1.00
Adj. Flow (vph)	4	444	444	217	292	0	371	0	155	0	0	0
RTOR Reduction (vph)	0	0	200	0	0	0	0	0	122	0	0	0
Lane Group Flow (vph)	4	444	244	217	292	0	185	186	33	0	0	0
Confl. Peds. (#/hr)	11		9			11			6			1
Confl. Bikes (#/hr)			2			1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)	23.5	23.5	38.5	19.5	47.0		15.0	15.0	15.0			
Effective Green, g (s)	23.5	23.5	38.5	19.5	47.0		15.0	15.0	15.0			
Actuated g/C Ratio	0.34	0.34	0.55	0.28	0.67		0.21	0.21	0.21			
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	341	1188	852	493	2376		348	360	310			
v/s Ratio Prot		c0.13	0.06	c0.12	0.08		c0.11	0.11				
v/s Ratio Perm	0.00		0.11						0.02			
v/c Ratio	0.01	0.37	0.29	0.44	0.12		0.53	0.52	0.11			
Uniform Delay, d1	15.5	17.7	8.4	20.8	4.1		24.4	24.3	22.1			
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.9	0.2	0.6	0.1		1.6	1.3	0.2			
Delay (s)	15.6	18.6	8.6	21.4	4.2		25.9	25.6	22.3			
Level of Service	B	B	A	C	A		C	C	C			
Approach Delay (s)		13.6			11.5			24.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	494	12	17	299	16	30	1	52	22	0	4
Future Volume (veh/h)	19	494	12	17	299	16	30	1	52	22	0	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	526	20	24	311	20	52	4	76	32	0	4
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.79	0.94	0.60	0.71	0.96	0.80	0.58	0.25	0.68	0.69	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	1551	59	36	1405	90	77	3	560	80	0	560
Arrive On Green	0.10	0.89	0.89	0.02	0.42	0.42	0.36	0.36	0.36	0.36	0.00	0.36
Sat Flow, veh/h	1774	3473	132	1774	3372	216	0	9	1575	0	0	1575
Grp Volume(v), veh/h	24	268	278	24	162	169	56	0	76	32	0	4
Grp Sat Flow(s),veh/h/ln	1774	1770	1836	1774	1770	1818	9	0	1575	0	0	1575
Q Serve(g_s), s	1.1	2.1	2.1	1.2	5.3	5.4	0.0	0.0	2.9	0.0	0.0	0.1
Cycle Q Clear(g_c), s	1.1	2.1	2.1	1.2	5.3	5.4	32.0	0.0	2.9	32.0	0.0	0.1
Prop In Lane	1.00		0.07	1.00		0.12	0.93		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	790	820	36	737	757	80	0	560	80	0	560
V/C Ratio(X)	0.27	0.34	0.34	0.67	0.22	0.22	0.70	0.00	0.14	0.40	0.00	0.01
Avail Cap(c_a), veh/h	217	790	820	138	737	757	80	0	560	80	0	560
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.0	2.8	2.8	43.8	16.9	16.9	43.2	0.0	19.6	45.0	0.0	18.7
Incr Delay (d2), s/veh	1.6	1.1	1.1	14.0	0.5	0.5	23.0	0.0	0.1	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.1	1.2	0.7	2.7	2.8	1.9	0.0	1.3	0.9	0.0	0.1
LnGrp Delay(d),s/veh	40.5	3.9	3.9	57.8	17.3	17.3	66.2	0.0	19.7	48.2	0.0	18.7
LnGrp LOS	D	A	A	E	B	B	E		B	D		B
Approach Vol, veh/h		570			355			132			36	
Approach Delay, s/veh		5.4			20.1			39.5			44.9	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	46.2		38.0	8.5	43.5		38.0
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	7.0	35.0		32.0	11.0	31.0		32.0
Max Q Clear Time (g_c+I1), s	3.2	4.1		34.0	3.1	7.4		34.0
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	3.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	13	46	159	77	44	15	350	7	12	235	40
Future Volume (veh/h)	60	13	46	159	77	44	15	350	7	12	235	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	68	20	52	196	112	72	16	372	12	16	267	48
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.88	0.65	0.89	0.81	0.69	0.61	0.94	0.94	0.58	0.75	0.88	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	581	158	834	713	555	357	71	490	15	73	422	73
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	896	298	1574	1318	1048	674	33	1811	57	39	1561	271
Grp Volume(v), veh/h	88	0	52	196	0	184	400	0	0	331	0	0
Grp Sat Flow(s),veh/h/ln	1194	0	1574	1318	0	1722	1901	0	0	1871	0	0
Q Serve(g_s), s	1.4	0.0	1.0	5.8	0.0	3.4	2.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.8	0.0	1.0	10.5	0.0	3.4	11.6	0.0	0.0	9.3	0.0	0.0
Prop In Lane	0.77		1.00	1.00		0.39	0.04		0.03	0.05		0.15
Lane Grp Cap(c), veh/h	738	0	834	713	0	912	577	0	0	569	0	0
V/C Ratio(X)	0.12	0.00	0.06	0.27	0.00	0.20	0.69	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	738	0	834	713	0	912	818	0	0	804	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.75	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.9	0.0	6.9	10.7	0.0	7.4	20.2	0.0	0.0	19.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	1.0	0.0	0.5	1.1	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.5	2.3	0.0	1.7	6.3	0.0	0.0	4.9	0.0	0.0
LnGrp Delay(d),s/veh	8.2	0.0	7.0	11.6	0.0	7.9	21.3	0.0	0.0	20.3	0.0	0.0
LnGrp LOS	A		A	B		A	C			C		
Approach Vol, veh/h		140			380			400			331	
Approach Delay, s/veh		7.8			9.8			21.3			20.3	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.8		22.2		37.8		22.2
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		24.0		24.0		24.0		24.0
Max Q Clear Time (g_c+I1), s		6.8		11.3		12.5		13.6
Green Ext Time (p_c), s		2.2		2.7		1.8		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	4	8	18	0	127	279	4	0	23	6	8
Future Vol, veh/h	0	4	8	18	0	127	279	4	0	23	6	8
Peak Hour Factor	0.92	0.50	0.40	0.75	0.92	0.72	0.93	0.33	0.92	0.96	0.75	0.50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	8	20	24	0	176	300	12	0	24	8	16
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.6	12.6	8.6
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	62%	13%	31%	23%
Vol Thru, %	16%	27%	68%	15%
Vol Right, %	22%	60%	1%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	30	410	13
LT Vol	23	4	127	3
Through Vol	6	8	279	2
RT Vol	8	18	4	8
Lane Flow Rate	48	52	489	24
Geometry Grp	1	1	1	1
Degree of Util (X)	0.069	0.062	0.564	0.032
Departure Headway (Hd)	5.161	4.277	4.155	4.88
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	697	840	855	737
Service Time	3.168	2.291	2.241	2.889
HCM Lane V/C Ratio	0.069	0.062	0.572	0.033
HCM Control Delay	8.6	7.6	12.6	8.1
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.2	0.2	3.6	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	3	2	8
Future Vol, veh/h	0	3	2	8
Peak Hour Factor	0.92	0.38	0.50	0.67
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	8	4	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	8.1
HCM LOS	A

Lane

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	32	93	9	0	20	106	22	0	117	62	42
Future Vol, veh/h	0	32	93	9	0	20	106	22	0	117	62	42
Peak Hour Factor	0.92	0.88	0.88	0.88	0.92	0.80	0.80	0.80	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	36	106	10	0	25	133	28	0	127	67	46
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	1
HCM Control Delay	11.4	11.8	10.2
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	24%	14%	11%	0%
Vol Thru, %	0%	100%	0%	69%	72%	89%	0%
Vol Right, %	0%	0%	100%	7%	15%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	117	62	42	134	148	167	29
LT Vol	117	0	0	32	20	18	0
Through Vol	0	62	0	93	106	149	0
RT Vol	0	0	42	9	22	0	29
Lane Flow Rate	127	67	46	152	185	214	37
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.23	0.113	0.067	0.268	0.317	0.38	0.058
Departure Headway (Hd)	6.52	6.012	5.301	6.328	6.163	6.393	5.626
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	551	595	674	566	583	561	635
Service Time	4.267	3.759	3.048	4.078	3.912	4.146	3.378
HCM Lane V/C Ratio	0.23	0.113	0.068	0.269	0.317	0.381	0.058
HCM Control Delay	11.2	9.5	8.4	11.4	11.8	13	8.7
HCM Lane LOS	B	A	A	B	B	B	A
HCM 95th-tile Q	0.9	0.4	0.2	1.1	1.4	1.8	0.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	18	149	29
Future Vol, veh/h	0	18	149	29
Peak Hour Factor	0.92	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	191	37
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	12.4
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	203.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	73	2	680	0	0	0	0	511	385	164	719	0
Future Vol, veh/h	73	2	680	0	0	0	0	511	385	164	719	0
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	300	-	0	-	-	-	-	-	90	175	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	93	75	83	83	92	85	57	75	71	83	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	2	907	0	0	0	0	896	513	231	866	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1777	2225	869	867	0	0	896	0	0
Stage 1	1329	1329	-	-	-	-	-	-	-
Stage 2	448	896	-	-	-	-	-	-	-
Critical Hdwy	6.63	6.53	6.23	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.83	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	2.218	-	-	2.22	-	-
Pot Cap-1 Maneuver	82	43	~ 350	777	-	-	753	-	-
Stage 1	246	223	-	-	-	-	-	-	-
Stage 2	612	358	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 57	0	~ 349	776	-	-	752	-	-
Mov Cap-2 Maneuver	~ 57	0	-	-	-	-	-	-	-
Stage 1	170	0	-	-	-	-	-	-	-
Stage 2	611	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 720.1	0	2.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	776	-	-	57	349	752	-	-
HCM Lane V/C Ratio	-	-	-	1.358	2.598	0.307	-	-
HCM Control Delay (s)	0	-	-	$ 361.1	$ 750.8	11.9	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	6.8	74.3	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	79	740	5	30	1	555	47	10	2	30	200
Future Volume (vph)	121	79	740	5	30	1	555	47	10	2	30	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	16	12	14	12	12	16	12	12	10	10
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lane Util. Factor		1.00	0.88		1.00		0.97	1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	0.99			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.99		1.00	0.97			1.00	0.85
Flt Protected		0.97	1.00		0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)		2051	3099		1940		3433	2036			1731	1451
Flt Permitted		0.97	1.00		0.99		0.95	1.00			0.97	1.00
Satd. Flow (perm)		2051	3099		1940		3433	2036			1694	1451
Peak-hour factor, PHF	0.86	0.79	0.91	0.31	0.83	0.25	0.89	0.69	0.63	0.50	0.68	0.78
Adj. Flow (vph)	141	100	813	16	36	4	624	68	16	4	44	256
RTOR Reduction (vph)	0	0	303	0	4	0	0	10	0	0	0	228
Lane Group Flow (vph)	0	241	510	0	52	0	624	74	0	0	48	28
Confl. Peds. (#/hr)			3						7			4
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Perm	NA	Perm
Protected Phases	2	2	3	1	1		3	8			4	
Permitted Phases			2							4		4
Actuated Green, G (s)		34.2	50.2		5.2		16.0	28.6			8.6	8.6
Effective Green, g (s)		34.2	50.2		5.2		16.0	28.6			8.6	8.6
Actuated g/C Ratio		0.43	0.63		0.07		0.20	0.36			0.11	0.11
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		876	2099		126		686	727			182	155
v/s Ratio Prot		c0.12	0.05		c0.03		c0.18	0.04				
v/s Ratio Perm			0.12								c0.03	0.02
v/c Ratio		0.28	0.24		0.41		0.91	0.10			0.26	0.18
Uniform Delay, d1		14.9	6.5		35.9		31.3	17.1			32.8	32.5
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		0.8	0.1		2.2		15.9	0.1			0.8	0.6
Delay (s)		15.6	6.6		38.1		47.2	17.2			33.6	33.0
Level of Service		B	A		D		D	B			C	C
Approach Delay (s)		8.7			38.1			43.7			33.1	
Approach LOS		A			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Lemon Grove Ave/North Ave			
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	14	85	593	43	51	694
Future Vol, veh/h	14	85	593	43	51	694
Conflicting Peds, #/hr	0	5	0	57	57	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	92	93	90	80	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	92	638	48	64	708

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1149	405	0	0	690	0
Stage 1	667	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	192	595	-	-	900	-
Stage 1	472	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	159	564	-	-	857	-
Mov Cap-2 Maneuver	159	-	-	-	-	-
Stage 1	469	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	410	857	-
HCM Lane V/C Ratio	-	-	0.264	0.074	-
HCM Control Delay (s)	-	-	16.9	9.5	0.5
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	74	231	55	74	15	140	519	6	16	620	41
Future Volume (veh/h)	112	74	231	55	74	15	140	519	6	16	620	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	100	269	68	96	24	173	558	12	28	729	52
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.82	0.74	0.86	0.81	0.77	0.63	0.81	0.93	0.50	0.57	0.85	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	123	291	177	238	53	209	1620	35	40	1211	86
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.12	0.46	0.46	0.02	0.36	0.36
Sat Flow, veh/h	391	358	850	359	695	154	1774	3540	76	1774	3345	238
Grp Volume(v), veh/h	506	0	0	188	0	0	173	279	291	28	385	396
Grp Sat Flow(s),veh/h/ln	1599	0	0	1207	0	0	1774	1770	1847	1774	1770	1814
Q Serve(g_s), s	17.9	0.0	0.0	0.0	0.0	0.0	8.6	9.1	9.1	1.4	16.0	16.0
Cycle Q Clear(g_c), s	27.3	0.0	0.0	9.4	0.0	0.0	8.6	9.1	9.1	1.4	16.0	16.0
Prop In Lane	0.27		0.53	0.36		0.13	1.00		0.04	1.00		0.13
Lane Grp Cap(c), veh/h	598	0	0	468	0	0	209	810	845	40	641	657
V/C Ratio(X)	0.85	0.00	0.00	0.40	0.00	0.00	0.83	0.34	0.34	0.71	0.60	0.60
Avail Cap(c_a), veh/h	654	0	0	519	0	0	276	810	845	99	641	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	0.0	22.1	0.0	0.0	38.8	15.7	15.7	43.7	23.4	23.4
Incr Delay (d2), s/veh	9.4	0.0	0.0	0.6	0.0	0.0	14.4	1.2	1.1	20.3	4.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	0.0	0.0	3.6	0.0	0.0	5.0	4.7	4.9	0.9	8.6	8.8
LnGrp Delay(d),s/veh	37.6	0.0	0.0	22.6	0.0	0.0	53.2	16.9	16.8	64.0	27.6	27.5
LnGrp LOS	D			C			D	B	B	E	C	C
Approach Vol, veh/h		506			188			743			809	
Approach Delay, s/veh		37.6			22.6			25.3			28.8	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	47.2		36.8	14.6	38.6		36.8
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	35.0		34.0	14.0	26.0		34.0
Max Q Clear Time (g_c+I1), s	3.4	11.1		29.3	10.6	18.0		11.4
Green Ext Time (p_c), s	0.0	5.9		1.5	0.2	3.6		3.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	21	62	603	38	100	806
Future Vol, veh/h	21	62	603	38	100	806
Conflicting Peds, #/hr	0	1	0	14	14	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	75	91	73	86	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	83	663	52	116	926

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1386	372	0	0	716	0
Stage 1	690	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	134	625	-	-	880	-
Stage 1	459	-	-	-	-	-
Stage 2	456	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	115	617	-	-	870	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	458	-	-	-	-	-
Stage 2	391	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	309	870	-
HCM Lane V/C Ratio	-	-	0.347	0.134	-
HCM Control Delay (s)	-	-	22.7	9.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.5	-

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	62	24	34	4	13	42	24	235	9	73	445	42
Future Vol, veh/h	62	24	34	4	13	42	24	235	9	73	445	42
Conflicting Peds, #/hr	2	0	13	13	0	2	11	0	2	2	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	75	85	50	65	75	67	92	56	73	94	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	32	40	8	20	56	36	255	16	100	473	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1064	1026	497	1062	1026	279	486	0	0	268	0	0
Stage 1	686	686	-	340	340	-	-	-	-	-	-	-
Stage 2	378	340	-	722	686	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	201	235	573	201	235	760	1077	-	-	1296	-	-
Stage 1	438	448	-	675	639	-	-	-	-	-	-	-
Stage 2	644	639	-	418	448	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	154	203	560	147	203	742	1068	-	-	1284	-	-
Mov Cap-2 Maneuver	154	203	-	147	203	-	-	-	-	-	-	-
Stage 1	417	407	-	643	609	-	-	-	-	-	-	-
Stage 2	551	609	-	327	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.5	17.7	1	1.3
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1068	-	-	209	368	1284	-	-
HCM Lane V/C Ratio	0.034	-	-	0.67	0.228	0.078	-	-
HCM Control Delay (s)	8.5	-	-	51.5	17.7	8	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.1	0.9	0.3	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	4	10	240	0	19	414
Future Vol, veh/h	4	10	240	0	19	414
Conflicting Peds, #/hr	1	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	63	97	100	59	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	16	247	0	32	455

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	767	256	0	0	248	0
Stage 1	248	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	370	783	-	-	1318	-
Stage 1	793	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	357	776	-	-	1308	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	630	1308	-
HCM Lane V/C Ratio	-	-	0.038	0.025	-
HCM Control Delay (s)	-	-	10.9	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Intersection Delay, s/veh	17.8
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	27	73	132	0	6	26	8	0	68	200	6
Future Vol, veh/h	0	27	73	132	0	6	26	8	0	68	200	6
Peak Hour Factor	0.92	0.84	0.87	0.77	0.92	0.75	0.59	0.50	0.92	0.90	0.94	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	32	84	171	0	8	44	16	0	76	213	8
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	1
HCM Control Delay	14.2	10.8	12.6
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	12%	15%	100%	0%
Vol Thru, %	0%	97%	31%	65%	0%	93%
Vol Right, %	0%	3%	57%	20%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	206	232	40	21	406
LT Vol	68	0	27	6	21	0
Through Vol	0	200	73	26	0	378
RT Vol	0	6	132	8	0	28
Lane Flow Rate	76	221	287	68	28	447
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.145	0.39	0.471	0.129	0.052	0.753
Departure Headway (Hd)	6.887	6.356	5.903	6.823	6.627	6.07
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	563	607	529	538	594
Service Time	4.676	4.144	3.991	4.823	4.401	3.843
HCM Lane V/C Ratio	0.147	0.393	0.473	0.129	0.052	0.753
HCM Control Delay	10.9	13.2	14.2	10.8	9.8	25.2
HCM Lane LOS	B	B	B	B	A	D
HCM 95th-tile Q	0.5	1.8	2.5	0.4	0.2	6.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	21	378	28
Future Vol, veh/h	0	21	378	28
Peak Hour Factor	0.92	0.75	0.92	0.78
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	28	411	36
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	24.3
HCM LOS	C

Lane

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	21	36	25	0	4	30	15	0	17	50	5
Future Vol, veh/h	0	21	36	25	0	4	30	15	0	17	50	5
Peak Hour Factor	0.92	0.88	0.82	0.63	0.92	0.50	0.83	0.63	0.92	0.61	0.83	0.42
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	44	40	0	8	36	24	0	28	60	12
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.7	7.4	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	24%	26%	8%
Vol Thru, %	69%	44%	61%
Vol Right, %	7%	30%	31%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	72	82	49
LT Vol	17	21	4
Through Vol	50	36	30
RT Vol	5	25	15
Lane Flow Rate	100	107	68
Geometry Grp	1	1	1
Degree of Util (X)	0.118	0.12	0.076
Departure Headway (Hd)	4.24	4.03	4.025
Convergence, Y/N	Yes	Yes	Yes
Cap	835	879	878
Service Time	2.316	2.102	2.105
HCM Lane V/C Ratio	0.12	0.122	0.077
HCM Control Delay	7.9	7.7	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.4	0.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	0	0
Future Vol, veh/h	0	0	0	0
Peak Hour Factor	0.92	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	0	0	0
Number of Lanes	0	0	0	0

Approach	
Opposing Approach	
Opposing Lanes	
Conflicting Approach Left	
Conflicting Lanes Left	
Conflicting Approach Right	
Conflicting Lanes Right	
HCM Control Delay	
HCM LOS	

Lane

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	18	17	11	2	14	35	7	174	5	22	298	22
Future Vol, veh/h	18	17	11	2	14	35	7	174	5	22	298	22
Conflicting Peds, #/hr	2	0	10	10	0	2	3	0	15	15	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	56	71	55	25	58	80	88	78	63	79	85	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	24	20	8	24	44	8	223	8	28	351	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	717	687	390	705	697	252	388	0	0	241	0	0
Stage 1	430	430	-	253	253	-	-	-	-	-	-	-
Stage 2	287	257	-	452	444	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	345	370	658	351	365	787	1170	-	-	1326	-	-
Stage 1	603	583	-	751	698	-	-	-	-	-	-	-
Stage 2	720	695	-	587	575	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	292	349	641	305	345	765	1152	-	-	1304	-	-
Mov Cap-2 Maneuver	292	349	-	305	345	-	-	-	-	-	-	-
Stage 1	592	561	-	737	685	-	-	-	-	-	-	-
Stage 2	639	682	-	521	553	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.5	13.6	0.3	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1152	-	-	363	495	1304	-	-
HCM Lane V/C Ratio	0.007	-	-	0.21	0.153	0.021	-	-
HCM Control Delay (s)	8.1	0	-	17.5	13.6	7.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.5	0.1	-	-

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	36	180	20	0	17	112	44	0	8	64	16
Future Vol, veh/h	0	36	180	20	0	17	112	44	0	8	64	16
Peak Hour Factor	0.92	0.69	0.82	0.83	0.92	0.53	0.85	0.85	0.92	0.67	0.76	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	52	220	24	0	32	132	52	0	12	84	16
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	13.2	11.4	10.3
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	15%	10%	38%
Vol Thru, %	73%	76%	65%	52%
Vol Right, %	18%	8%	25%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	88	236	173	221
LT Vol	8	36	17	84
Through Vol	64	180	112	114
RT Vol	16	20	44	23
Lane Flow Rate	112	296	216	325
Geometry Grp	1	1	1	1
Degree of Util (X)	0.183	0.456	0.334	0.503
Departure Headway (Hd)	5.879	5.545	5.574	5.579
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	607	648	643	643
Service Time	3.951	3.603	3.637	3.634
HCM Lane V/C Ratio	0.185	0.457	0.336	0.505
HCM Control Delay	10.3	13.2	11.4	14.2
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.7	2.4	1.5	2.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	84	114	23
Future Vol, veh/h	0	84	114	23
Peak Hour Factor	0.92	0.58	0.75	0.82
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	145	152	28
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	14.2
HCM LOS	B

Lane

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	26	242	9	0	23	150	65	0	8	81	9
Future Vol, veh/h	0	26	242	9	0	23	150	65	0	8	81	9
Peak Hour Factor	0.92	0.72	0.80	0.56	0.92	0.96	0.89	0.71	0.92	0.67	0.72	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	36	303	16	0	24	169	92	0	12	113	12
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	17.6	14.5	11.9
HCM LOS	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	9%	10%	36%
Vol Thru, %	83%	87%	63%	58%
Vol Right, %	9%	3%	27%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	277	238	291
LT Vol	8	26	23	106
Through Vol	81	242	150	169
RT Vol	9	9	65	16
Lane Flow Rate	136	355	284	329
Geometry Grp	1	1	1	1
Degree of Util (X)	0.251	0.594	0.476	0.568
Departure Headway (Hd)	6.631	6.029	6.035	6.227
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	540	599	596	578
Service Time	4.689	4.072	4.082	4.272
HCM Lane V/C Ratio	0.252	0.593	0.477	0.569
HCM Control Delay	11.9	17.6	14.5	17.2
HCM Lane LOS	B	C	B	C
HCM 95th-tile Q	1	3.9	2.6	3.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	106	169	16
Future Vol, veh/h	0	106	169	16
Peak Hour Factor	0.92	0.91	0.88	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	116	192	20
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	17.2
HCM LOS	C

Lane

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

02/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	40	20	70	20	230	20	570	540	350	490	60
Future Volume (veh/h)	30	40	20	70	20	230	20	570	540	350	490	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	43	22	76	0	265	22	620	587	380	533	65
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	139	71	189	0	351	76	639	563	423	1768	215
Arrive On Green	0.17	0.17	0.17	0.11	0.00	0.11	0.04	0.36	0.36	0.24	0.56	0.56
Sat Flow, veh/h	617	805	412	1774	0	3293	1774	1770	1559	1774	3173	386
Grp Volume(v), veh/h	98	0	0	76	0	265	22	620	587	380	297	301
Grp Sat Flow(s),veh/h/ln	1834	0	0	1774	0	1647	1774	1770	1559	1774	1770	1789
Q Serve(g_s), s	7.0	0.0	0.0	6.0	0.0	11.7	1.8	51.7	54.2	31.1	13.4	13.5
Cycle Q Clear(g_c), s	7.0	0.0	0.0	6.0	0.0	11.7	1.8	51.7	54.2	31.1	13.4	13.5
Prop In Lane	0.34		0.22	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	318	0	0	189	0	351	76	639	563	423	986	997
V/C Ratio(X)	0.31	0.00	0.00	0.40	0.00	0.75	0.29	0.97	1.04	0.90	0.30	0.30
Avail Cap(c_a), veh/h	318	0	0	189	0	351	76	639	563	423	986	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.50	0.50	0.50	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	62.5	0.0	65.1	69.6	47.1	47.9	55.3	17.7	17.7
Incr Delay (d2), s/veh	2.5	0.0	0.0	6.2	0.0	14.0	0.4	18.9	38.3	20.8	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	3.3	0.0	6.0	0.9	28.5	29.3	17.8	6.7	6.8
LnGrp Delay(d),s/veh	56.7	0.0	0.0	68.8	0.0	79.1	70.0	66.0	86.2	76.1	18.4	18.5
LnGrp LOS	E			E		E	E	E	F	E	B	B
Approach Vol, veh/h		98			341			1229			978	
Approach Delay, s/veh		56.7			76.8			75.7			40.9	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	40.0	58.8		30.6	10.6	88.2		20.6
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	35.8	* 54		26.0	6.4	* 84		16.0
Max Q Clear Time (g_c+I1), s	33.1	56.2		9.0	3.8	15.5		13.7
Green Ext Time (p_c), s	0.3	0.0		0.2	0.3	1.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	62.3
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	360	120	50	320	220	230	660	50	170	320	100
Future Volume (veh/h)	330	360	120	50	320	220	230	660	50	170	320	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	359	391	130	54	348	239	250	717	54	185	348	109
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	379	1245	550	70	920	409	266	934	70	252	542	167
Arrive On Green	0.11	0.35	0.35	0.04	0.26	0.26	0.15	0.28	0.28	0.07	0.20	0.20
Sat Flow, veh/h	3442	3539	1564	1845	3539	1572	1774	3334	251	3442	2661	821
Grp Volume(v), veh/h	359	391	130	54	348	239	250	380	391	185	230	227
Grp Sat Flow(s),veh/h/ln	1721	1770	1564	1845	1770	1572	1774	1770	1815	1721	1770	1712
Q Serve(g_s), s	10.4	8.0	5.9	2.9	8.1	9.1	13.9	19.7	19.7	5.3	11.9	12.2
Cycle Q Clear(g_c), s	10.4	8.0	5.9	2.9	8.1	9.1	13.9	19.7	19.7	5.3	11.9	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	379	1245	550	70	920	409	266	496	509	252	360	349
V/C Ratio(X)	0.95	0.31	0.24	0.77	0.38	0.58	0.94	0.77	0.77	0.73	0.64	0.65
Avail Cap(c_a), veh/h	379	1245	550	129	920	409	266	584	599	344	495	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	44.2	23.6	22.9	47.7	30.4	15.4	42.1	33.0	33.0	45.4	36.4	36.6
Incr Delay (d2), s/veh	32.6	0.7	1.0	6.3	1.2	5.9	38.6	5.2	5.1	2.7	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	4.0	2.7	1.6	4.1	4.6	9.7	10.3	10.6	2.6	6.0	5.9
LnGrp Delay(d),s/veh	76.8	24.3	23.9	53.9	31.5	21.3	80.7	38.2	38.1	48.1	38.2	38.5
LnGrp LOS	E	C	C	D	C	C	F	D	D	D	D	D
Approach Vol, veh/h		880			641			1021			642	
Approach Delay, s/veh		45.7			29.6			48.5			41.2	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	41.2	19.0	26.4	17.0	32.0	11.3	34.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	7.0	30.0	15.0	28.0	11.0	* 26	10.0	33.0
Max Q Clear Time (g_c+I1), s	4.9	10.0	15.9	14.2	12.4	11.1	7.3	21.7
Green Ext Time (p_c), s	0.0	3.3	0.0	4.4	0.0	2.3	0.1	4.0

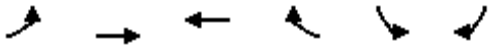
Intersection Summary	
HCM 2010 Ctrl Delay	42.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	50	50	80	80	90	80	810	60	30	470	40
Future Volume (veh/h)	50	50	50	80	80	90	80	810	60	30	470	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	54	54	87	87	98	87	880	65	33	511	43
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	224	224	198	218	220	217	111	877	741	44	807	673
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.13	0.94	0.94	0.02	0.43	0.43
Sat Flow, veh/h	461	605	533	446	593	585	1774	1863	1573	1774	1863	1554
Grp Volume(v), veh/h	162	0	0	272	0	0	87	880	65	33	511	43
Grp Sat Flow(s),veh/h/ln	1598	0	0	1624	0	0	1774	1863	1573	1774	1863	1554
Q Serve(g_s), s	0.0	0.0	0.0	5.8	0.0	0.0	4.3	42.4	0.2	1.7	19.3	1.5
Cycle Q Clear(g_c), s	5.7	0.0	0.0	10.8	0.0	0.0	4.3	42.4	0.2	1.7	19.3	1.5
Prop In Lane	0.33		0.33	0.32		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	646	0	0	655	0	0	111	877	741	44	807	673
V/C Ratio(X)	0.25	0.00	0.00	0.42	0.00	0.00	0.78	1.00	0.09	0.75	0.63	0.06
Avail Cap(c_a), veh/h	646	0	0	655	0	0	197	1097	926	79	973	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.39	0.39	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	21.1	0.0	0.0	38.8	2.6	1.4	43.6	19.9	14.9
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.9	0.0	0.0	4.7	16.5	0.0	21.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.0	5.4	0.0	0.0	2.2	17.6	0.1	1.1	10.2	0.6
LnGrp Delay(d),s/veh	20.5	0.0	0.0	23.0	0.0	0.0	43.5	19.2	1.4	65.2	20.9	14.9
LnGrp LOS	C			C			D	F	A	E	C	B
Approach Vol, veh/h		162			272			1032			587	
Approach Delay, s/veh		20.5			23.0			20.1			22.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	49.6		34.1	9.6	46.3		34.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	53.0		21.0	10.0	47.0		21.0
Max Q Clear Time (g_c+I1), s	3.7	44.4		7.7	6.3	21.3		12.8
Green Ext Time (p_c), s	0.0	4.5		1.6	0.1	7.8		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	400	470	10	60	90
Future Volume (veh/h)	80	400	470	10	60	90
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	87	435	511	11	65	98
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	115	2922	2545	55	151	138
Arrive On Green	0.06	0.83	1.00	1.00	0.09	0.09
Sat Flow, veh/h	1845	3632	3634	76	1774	1615
Grp Volume(v), veh/h	87	435	255	267	65	98
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1847	1774	1615
Q Serve(g_s), s	4.2	2.2	0.0	0.0	3.1	5.3
Cycle Q Clear(g_c), s	4.2	2.2	0.0	0.0	3.1	5.3
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	115	2922	1272	1328	151	138
V/C Ratio(X)	0.76	0.15	0.20	0.20	0.43	0.71
Avail Cap(c_a), veh/h	349	2922	1272	1328	434	395
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	41.5	1.6	0.0	0.0	39.1	40.1
Incr Delay (d2), s/veh	8.9	0.1	0.3	0.3	1.9	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.1	0.1	0.1	1.6	4.9
LnGrp Delay(d),s/veh	50.4	1.7	0.3	0.3	41.0	46.7
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		522	522		163	
Approach Delay, s/veh		9.8	0.3		44.4	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		78.3		11.7	9.6	68.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		60.0		22.0	17.0	39.0		
Max Q Clear Time (g_c+I1), s		4.2		7.3	6.2	2.0		
Green Ext Time (p_c), s		4.4		0.5	0.2	4.4		

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	350	50	40	360	20	80	30	30	40	30	110
Future Volume (veh/h)	80	350	50	40	360	20	80	30	30	40	30	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	87	380	54	43	391	22	87	33	33	43	33	120
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	2086	294	55	2171	122	165	63	45	184	125	257
Arrive On Green	0.12	1.00	1.00	0.06	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1845	3113	439	1845	3401	191	613	379	273	730	751	1543
Grp Volume(v), veh/h	87	215	219	43	203	210	153	0	0	76	0	120
Grp Sat Flow(s),veh/h/ln	1845	1770	1782	1845	1770	1822	1265	0	0	1481	0	1543
Q Serve(g_s), s	4.1	0.0	0.0	2.1	0.0	0.0	7.2	0.0	0.0	0.0	0.0	6.3
Cycle Q Clear(g_c), s	4.1	0.0	0.0	2.1	0.0	0.0	10.9	0.0	0.0	3.8	0.0	6.3
Prop In Lane	1.00		0.25	1.00		0.10	0.57		0.22	0.57		1.00
Lane Grp Cap(c), veh/h	114	1186	1194	55	1130	1163	273	0	0	309	0	257
V/C Ratio(X)	0.76	0.18	0.18	0.78	0.18	0.18	0.56	0.00	0.00	0.25	0.00	0.47
Avail Cap(c_a), veh/h	349	1186	1194	246	1130	1163	514	0	0	561	0	514
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	0.0	42.0	0.0	0.0	36.3	0.0	0.0	32.7	0.0	33.9
Incr Delay (d2), s/veh	9.9	0.3	0.3	19.9	0.3	0.3	1.8	0.0	0.0	0.4	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.1	0.1	1.4	0.1	0.1	3.7	0.0	0.0	1.7	0.0	2.8
LnGrp Delay(d),s/veh	48.7	0.3	0.3	61.9	0.3	0.3	38.1	0.0	0.0	33.1	0.0	35.2
LnGrp LOS	D	A	A	E	A	A	D			C		D
Approach Vol, veh/h		521			456			153			196	
Approach Delay, s/veh		8.4			6.1			38.1			34.4	
Approach LOS		A			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	64.3		19.0	9.6	61.5		19.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	36.0		30.0	17.0	31.0		30.0
Max Q Clear Time (g_c+I1), s	4.1	2.0		8.3	6.1	2.0		12.9
Green Ext Time (p_c), s	0.0	3.5		2.0	0.2	3.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	290	20	10	280	70	50	190	20	90	90	70
Future Volume (veh/h)	60	290	20	10	280	70	50	190	20	90	90	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	65	315	22	11	304	76	54	207	22	98	98	76
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	1879	130	20	1467	359	69	282	231	127	190	148
Arrive On Green	0.09	1.00	1.00	0.02	1.00	1.00	0.04	0.15	0.15	0.07	0.19	0.19
Sat Flow, veh/h	1845	3350	233	1845	2790	684	1774	1863	1525	1774	1006	780
Grp Volume(v), veh/h	65	166	171	11	191	189	54	207	22	98	0	174
Grp Sat Flow(s),veh/h/ln	1845	1770	1812	1845	1770	1704	1774	1863	1525	1774	0	1786
Q Serve(g_s), s	3.1	0.0	0.0	0.5	0.0	0.0	2.7	9.6	1.1	4.9	0.0	7.9
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.5	0.0	0.0	2.7	9.6	1.1	4.9	0.0	7.9
Prop In Lane	1.00		0.13	1.00		0.40	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	85	993	1017	20	930	896	69	282	231	127	0	338
V/C Ratio(X)	0.77	0.17	0.17	0.56	0.20	0.21	0.78	0.73	0.10	0.77	0.00	0.52
Avail Cap(c_a), veh/h	205	993	1017	82	930	896	177	435	356	286	0	536
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.97	0.97	0.97	1.00	1.00	1.00	0.85	0.00	0.85
Uniform Delay (d), s/veh	40.4	0.0	0.0	43.8	0.0	0.0	42.9	36.5	32.9	41.1	0.0	32.8
Incr Delay (d2), s/veh	13.2	0.4	0.4	21.8	0.5	0.5	17.0	3.7	0.2	8.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	0.1	0.4	0.1	0.1	1.7	5.2	0.5	2.7	0.0	4.0
LnGrp Delay(d),s/veh	53.6	0.4	0.4	65.6	0.5	0.5	59.8	40.2	33.1	49.3	0.0	33.8
LnGrp LOS	D	A	A	E	A	A	E	D	C	D		C
Approach Vol, veh/h		402			391			283			272	
Approach Delay, s/veh		9.0			2.3			43.4			39.4	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	56.5	7.5	21.0	8.1	53.3	10.9	17.6
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	4.0	32.0	9.0	27.0	10.0	26.0	14.5	21.0
Max Q Clear Time (g_c+I1), s	2.5	2.0	4.7	9.9	5.1	2.0	6.9	11.6
Green Ext Time (p_c), s	0.0	2.9	0.0	2.2	0.1	2.8	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	210	20	40	230	50	10	20	30	80	70	120
Future Volume (veh/h)	210	210	20	40	230	50	10	20	30	80	70	120
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1863	1863	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	228	228	22	43	250	54	11	22	33	87	76	130
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1635	156	54	1118	236	19	157	235	112	177	304
Arrive On Green	0.24	0.84	0.84	0.03	0.39	0.39	0.01	0.23	0.23	0.06	0.28	0.28
Sat Flow, veh/h	1845	3250	310	1774	2877	607	1774	695	1043	1774	639	1093
Grp Volume(v), veh/h	228	123	127	43	151	153	11	0	55	87	0	206
Grp Sat Flow(s),veh/h/ln	1845	1770	1790	1774	1770	1714	1774	0	1738	1774	0	1732
Q Serve(g_s), s	10.6	1.1	1.2	2.2	5.2	5.4	0.6	0.0	2.3	4.3	0.0	8.8
Cycle Q Clear(g_c), s	10.6	1.1	1.2	2.2	5.2	5.4	0.6	0.0	2.3	4.3	0.0	8.8
Prop In Lane	1.00		0.17	1.00		0.35	1.00		0.60	1.00		0.63
Lane Grp Cap(c), veh/h	268	890	900	54	688	666	19	0	391	112	0	481
V/C Ratio(X)	0.85	0.14	0.14	0.79	0.22	0.23	0.58	0.00	0.14	0.77	0.00	0.43
Avail Cap(c_a), veh/h	492	890	900	177	688	666	99	0	391	256	0	481
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.92	0.92	0.92	1.00	0.00	1.00	0.42	0.00	0.42
Uniform Delay (d), s/veh	33.2	3.7	3.7	43.3	18.4	18.5	44.3	0.0	27.9	41.5	0.0	26.6
Incr Delay (d2), s/veh	7.4	0.3	0.3	20.4	0.7	0.7	25.0	0.0	0.8	4.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.6	0.6	1.4	2.7	2.7	0.4	0.0	1.2	2.3	0.0	4.3
LnGrp Delay(d),s/veh	40.5	4.0	4.0	63.7	19.1	19.2	69.4	0.0	28.7	46.3	0.0	27.8
LnGrp LOS	D	A	A	E	B	B	E		C	D		C
Approach Vol, veh/h		478			347			66			293	
Approach Delay, s/veh		21.4			24.7			35.4			33.3	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	39.0	5.0	29.0	6.8	49.3	9.7	24.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	20.0	5.0	25.0	9.0	35.0	13.0	17.0
Max Q Clear Time (g_c+I1), s	12.6	7.4	2.6	10.8	4.2	3.2	6.3	4.3
Green Ext Time (p_c), s	0.5	2.6	0.0	1.4	0.0	3.5	0.1	1.3

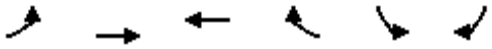
Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	210	60	40	250	60	130	630	90	80	370	10
Future Volume (veh/h)	20	210	60	40	250	60	130	630	90	80	370	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	228	65	43	272	65	141	685	98	87	402	11
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	1081	298	63	912	212	168	895	128	111	905	25
Arrive On Green	0.09	0.40	0.40	0.04	0.33	0.33	0.09	0.29	0.29	0.06	0.26	0.26
Sat Flow, veh/h	1774	2691	741	1774	2793	649	1774	3093	442	1774	3517	96
Grp Volume(v), veh/h	22	147	146	43	169	168	141	392	391	87	202	211
Grp Sat Flow(s),veh/h/ln	1774	1770	1662	1774	1770	1673	1774	1770	1765	1774	1770	1844
Q Serve(g_s), s	1.1	5.2	5.5	2.3	6.8	7.1	7.4	19.2	19.2	4.6	9.1	9.1
Cycle Q Clear(g_c), s	1.1	5.2	5.5	2.3	6.8	7.1	7.4	19.2	19.2	4.6	9.1	9.1
Prop In Lane	1.00		0.45	1.00		0.39	1.00		0.25	1.00		0.05
Lane Grp Cap(c), veh/h	160	711	668	63	577	546	168	512	511	111	455	474
V/C Ratio(X)	0.14	0.21	0.22	0.68	0.29	0.31	0.84	0.76	0.77	0.78	0.44	0.45
Avail Cap(c_a), veh/h	160	711	668	112	577	546	168	596	595	131	559	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	39.8	18.5	18.6	45.3	23.8	24.0	42.3	30.8	30.8	43.9	29.6	29.6
Incr Delay (d2), s/veh	0.4	0.6	0.7	12.0	1.3	1.5	29.6	5.0	5.1	21.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.6	2.6	1.3	3.5	3.5	5.0	10.1	10.1	2.9	4.5	4.7
LnGrp Delay(d),s/veh	40.2	19.2	19.4	57.2	25.1	25.4	71.9	35.8	35.9	65.8	30.2	30.2
LnGrp LOS	D	B	B	E	C	C	E	D	D	E	C	C
Approach Vol, veh/h		315			380			924			500	
Approach Delay, s/veh		20.7			28.9			41.4			36.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	44.2	13.0	30.4	14.6	37.0	9.9	33.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	6.0	30.0	9.0	30.0	5.0	* 31	7.0	32.0
Max Q Clear Time (g_c+I1), s	4.3	7.5	9.4	11.1	3.1	9.1	6.6	21.2
Green Ext Time (p_c), s	0.0	1.2	0.0	4.9	0.0	1.2	0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.9
HCM 2010 LOS	C

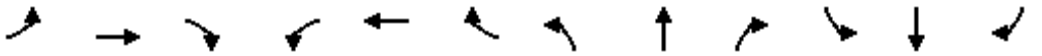
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	350	380	350	130	40
Future Volume (veh/h)	40	350	380	350	130	40
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	43	380	413	380	141	43
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	55	2850	2583	1318	188	174
Arrive On Green	0.03	0.81	0.73	0.73	0.11	0.11
Sat Flow, veh/h	1774	3632	3632	1576	1774	1647
Grp Volume(v), veh/h	43	380	413	380	141	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1576	1774	1647
Q Serve(g_s), s	2.2	2.1	3.2	4.7	6.9	2.2
Cycle Q Clear(g_c), s	2.2	2.1	3.2	4.7	6.9	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	55	2850	2583	1318	188	174
V/C Ratio(X)	0.79	0.13	0.16	0.29	0.75	0.25
Avail Cap(c_a), veh/h	237	2850	2583	1318	710	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	43.3	1.9	3.7	1.6	39.1	36.9
Incr Delay (d2), s/veh	21.5	0.1	0.1	0.5	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.0	1.6	3.5	3.7	2.1
LnGrp Delay(d),s/veh	64.8	2.0	3.8	2.1	45.0	37.7
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		423	793		184	
Approach Delay, s/veh		8.4	3.0		43.3	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		76.5		13.5	6.8	69.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		46.0		36.0	12.0	30.0		
Max Q Clear Time (g_c+I1), s		4.1		8.9	4.2	6.7		
Green Ext Time (p_c), s		6.1		0.7	0.0	5.6		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	250	190	150	320	0	380	0	140	0	0	0
Future Volume (vph)	0	250	190	150	320	0	380	0	140	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95	1.00	1.00	0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00	0.97			
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Frt		1.00	0.85	1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3539	1387	1770	3539		1625	1681	1440			
Flt Permitted		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3539	1387	1770	3539		1625	1681	1440			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	272	207	163	348	0	413	0	152	0	0	0
RTOR Reduction (vph)	0	0	59	0	0	0	0	0	122	0	0	0
Lane Group Flow (vph)	0	272	148	163	348	0	206	207	30	0	0	0
Confl. Peds. (#/hr)	5		15			5			8			
Confl. Bikes (#/hr)						1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)		46.8	64.5	13.5	64.3		17.7	17.7	17.7			
Effective Green, g (s)		46.8	64.5	13.5	64.3		17.7	17.7	17.7			
Actuated g/C Ratio		0.52	0.72	0.15	0.71		0.20	0.20	0.20			
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		1840	1055	265	2528		319	330	283			
v/s Ratio Prot		c0.08	0.03	c0.09	0.10		c0.13	0.12				
v/s Ratio Perm			0.08						0.02			
v/c Ratio		0.15	0.14	0.62	0.14		0.65	0.63	0.11			
Uniform Delay, d1		11.2	4.0	35.8	4.1		33.3	33.1	29.7			
Progression Factor		1.26	5.02	1.30	0.83		1.00	1.00	1.00			
Incremental Delay, d2		0.2	0.1	4.2	0.1		4.4	3.7	0.2			
Delay (s)		14.4	20.2	50.7	3.5		37.7	36.8	29.8			
Level of Service		B	C	D	A		D	D	C			
Approach Delay (s)		16.9			18.6			35.3			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	310	10	10	350	60	40	10	120	50	0	0
Future Volume (veh/h)	40	310	10	10	350	60	40	10	120	50	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	43	337	11	11	380	65	43	11	130	54	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	2340	76	19	1830	310	247	55	223	222	0	225
Arrive On Green	0.15	1.00	1.00	0.01	0.61	0.61	0.14	0.14	0.14	0.14	0.00	0.00
Sat Flow, veh/h	1774	3497	114	1774	3016	511	1231	389	1563	1001	0	1583
Grp Volume(v), veh/h	43	170	178	11	221	224	54	0	130	54	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1770	1757	1620	0	1563	1001	0	1583
Q Serve(g_s), s	2.0	0.0	0.0	0.6	5.1	5.2	0.0	0.0	7.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0	0.6	5.1	5.2	2.4	0.0	7.0	6.0	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.29	0.80		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	1184	1232	19	1074	1066	302	0	223	222	0	225
V/C Ratio(X)	0.33	0.14	0.14	0.58	0.21	0.21	0.18	0.00	0.58	0.24	0.00	0.00
Avail Cap(c_a), veh/h	237	1184	1232	79	1074	1066	617	0	556	485	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.75	0.75	0.75	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.4	0.0	0.0	44.3	8.0	8.0	34.1	0.0	36.1	36.8	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.3	0.2	19.2	0.3	0.3	0.3	0.0	2.4	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	0.1	0.4	2.6	2.6	1.2	0.0	3.2	1.3	0.0	0.0
LnGrp Delay(d),s/veh	37.9	0.3	0.2	63.5	8.3	8.3	34.4	0.0	38.5	37.4	0.0	0.0
LnGrp LOS	D	A	A	E	A	A	C		D	D		
Approach Vol, veh/h		391			456			184			54	
Approach Delay, s/veh		4.4			9.6			37.3			37.4	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	66.2		18.8	10.6	60.6		18.8
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	38.0		32.0	12.0	30.0		32.0
Max Q Clear Time (g_c+I1), s	2.6	2.0		8.0	4.0	7.2		9.0
Green Ext Time (p_c), s	0.0	3.1		1.0	0.0	3.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	20	380	140	70	10	340	20	10	110	30
Future Volume (veh/h)	50	10	20	380	140	70	10	340	20	10	110	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	54	11	22	413	152	76	11	370	22	11	120	33
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	580	108	827	723	613	307	72	464	27	82	371	97
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	881	206	1580	1368	1172	586	20	1781	104	47	1427	371
Grp Volume(v), veh/h	65	0	22	413	0	228	403	0	0	164	0	0
Grp Sat Flow(s),veh/h/ln	1086	0	1580	1368	0	1758	1905	0	0	1846	0	0
Q Serve(g_s), s	1.0	0.0	0.4	13.6	0.0	3.9	2.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.4	18.6	0.0	3.9	11.0	0.0	0.0	4.0	0.0	0.0
Prop In Lane	0.83		1.00	1.00		0.33	0.03		0.05	0.07		0.20
Lane Grp Cap(c), veh/h	687	0	827	723	0	920	563	0	0	550	0	0
V/C Ratio(X)	0.09	0.00	0.03	0.57	0.00	0.25	0.72	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	687	0	827	723	0	920	719	0	0	695	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	6.4	12.7	0.0	7.2	19.2	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	3.3	0.0	0.6	2.5	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	5.7	0.0	2.1	6.1	0.0	0.0	2.1	0.0	0.0
LnGrp Delay(d),s/veh	8.0	0.0	6.4	16.0	0.0	7.9	21.7	0.0	0.0	16.9	0.0	0.0
LnGrp LOS	A		A	B		A	C			B		
Approach Vol, veh/h		87			641			403			164	
Approach Delay, s/veh		7.6			13.1			21.7			16.9	
Approach LOS		A			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		20.4		35.0		20.4
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0		19.0
Max Q Clear Time (g_c+I1), s		7.0		6.0		20.6		13.0
Green Ext Time (p_c), s		3.4		2.0		2.3		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	30	320	590	0	70	0	210	0	0	0
Future Volume (veh/h)	0	20	30	320	590	0	70	0	210	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1976	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	22	33	348	641	0	76	0	228	0	0	0
Adj No. of Lanes	1	1	0	1	1	0	0	1	2	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	317	475	386	1366	0	314	0	1099	0	2	0
Arrive On Green	0.00	0.47	0.47	0.22	0.73	0.00	0.18	0.00	0.18	0.00	0.00	0.00
Sat Flow, veh/h	1774	672	1008	1774	1863	0	1764	0	2771	0	1863	0
Grp Volume(v), veh/h	0	0	55	348	641	0	76	0	228	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1680	1774	1863	0	1764	0	1385	0	1863	0
Q Serve(g_s), s	0.0	0.0	1.6	17.2	12.6	0.0	3.3	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.6	17.2	12.6	0.0	3.3	0.0	4.9	0.0	0.0	0.0
Prop In Lane	1.00		0.60	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	0	791	386	1366	0	314	0	1099	0	2	0
V/C Ratio(X)	0.00	0.00	0.07	0.90	0.47	0.00	0.24	0.00	0.21	0.00	0.00	0.00
Avail Cap(c_a), veh/h	79	0	791	453	1366	0	314	0	1099	0	331	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00	0.80	0.00	0.80	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	13.0	34.3	4.9	0.0	31.8	0.0	17.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	18.9	1.2	0.0	1.5	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	10.4	6.8	0.0	1.8	0.0	1.9	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	13.2	53.2	6.0	0.0	33.3	0.0	18.3	0.0	0.0	0.0
LnGrp LOS			B	D	A		C		B			
Approach Vol, veh/h		55			989			304			0	
Approach Delay, s/veh		13.2			22.6			22.0			0.0	
Approach LOS		B			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.6	46.4		0.0	0.0	70.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	19.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	19.2	3.6		0.0	0.0	14.6		6.9
Green Ext Time (p_c), s	0.4	4.2		0.0	0.0	5.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	80	10	30	220	40	250	100	20	20	70	20
Future Vol, veh/h	60	80	10	30	220	40	250	100	20	20	70	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	87	11	33	239	43	272	109	22	22	76	22
Number of Lanes	0	1	0	0	1	0	1	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	1	1
HCM Control Delay	12.8	17	14.8	11.7
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	40%	10%	22%	0%
Vol Thru, %	0%	100%	0%	53%	76%	78%	0%
Vol Right, %	0%	0%	100%	7%	14%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	250	100	20	150	290	90	20
LT Vol	250	0	0	60	30	20	0
Through Vol	0	100	0	80	220	70	0
RT Vol	0	0	20	10	40	0	20
Lane Flow Rate	272	109	22	163	315	98	22
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.518	0.192	0.034	0.311	0.559	0.206	0.04
Departure Headway (Hd)	6.868	6.358	5.644	6.87	6.387	7.591	6.656
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	522	561	630	520	561	475	533
Service Time	4.642	4.132	3.417	4.657	4.161	5.291	4.455
HCM Lane V/C Ratio	0.521	0.194	0.035	0.313	0.561	0.206	0.041
HCM Control Delay	16.9	10.7	8.6	12.8	17	12.2	9.7
HCM Lane LOS	C	B	A	B	C	B	A
HCM 95th-tile Q	2.9	0.7	0.1	1.3	3.4	0.8	0.1

Intersection	
Intersection Delay, s/veh	65.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	400	0	0	0	0	700	520	200	600	0
Future Vol, veh/h	20	0	400	0	0	0	0	700	520	200	600	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	435	0	0	0	0	761	565	217	652	0
Number of Lanes	1	0	2	0	0	0	0	2	1	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	16.2	47.5	119.9
HCM LOS	C	E	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	0%	50%	0%
Vol Thru, %	100%	100%	0%	0%	0%	0%	50%	100%
Vol Right, %	0%	0%	100%	0%	100%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	350	520	20	200	200	400	400
LT Vol	0	0	0	20	0	0	200	0
Through Vol	350	350	0	0	0	0	200	400
RT Vol	0	0	520	0	200	200	0	0
Lane Flow Rate	380	380	565	22	217	217	435	435
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.879	0.879	0.924	0.057	0.496	0.391	1.155	1.124
Departure Headway (Hd)	8.717	8.717	6.219	9.687	8.454	6.671	9.566	9.31
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	418	418	588	372	428	543	383	391
Service Time	6.417	6.417	3.919	7.387	6.154	4.371	7.266	7.01
HCM Lane V/C Ratio	0.909	0.909	0.961	0.059	0.507	0.4	1.136	1.113
HCM Control Delay	48.9	48.9	45.5	13	19.2	13.6	125.8	114
HCM Lane LOS	E	E	E	B	C	B	F	F
HCM 95th-tile Q	9	9	11.7	0.2	2.7	1.8	16.9	16.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	30	430	0	50	0	640	60	10	0	20	420
Future Volume (veh/h)	90	30	430	0	50	0	640	60	10	0	20	420
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	98	33	467	0	54	0	696	65	11	0	22	457
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	160	988	0	72	0	788	762	129	0	373	317
Arrive On Green	0.35	0.35	0.35	0.00	0.04	0.00	0.23	0.47	0.47	0.00	0.20	0.20
Sat Flow, veh/h	1343	452	2787	0	1863	0	3442	1610	272	0	1863	1583
Grp Volume(v), veh/h	131	0	467	0	54	0	696	0	76	0	22	457
Grp Sat Flow(s),veh/h/ln	1796	0	1393	0	1863	0	1721	0	1882	0	1863	1583
Q Serve(g_s), s	4.6	0.0	11.7	0.0	2.6	0.0	17.6	0.0	2.0	0.0	0.9	18.0
Cycle Q Clear(g_c), s	4.6	0.0	11.7	0.0	2.6	0.0	17.6	0.0	2.0	0.0	0.9	18.0
Prop In Lane	0.75		1.00	0.00		0.00	1.00		0.14	0.00		1.00
Lane Grp Cap(c), veh/h	636	0	988	0	72	0	788	0	891	0	373	317
V/C Ratio(X)	0.21	0.00	0.47	0.00	0.75	0.00	0.88	0.00	0.09	0.00	0.06	1.44
Avail Cap(c_a), veh/h	636	0	988	0	331	0	880	0	941	0	373	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00	0.58	0.00	0.58	0.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	22.5	0.0	42.8	0.0	33.5	0.0	13.0	0.0	29.1	36.0
Incr Delay (d2), s/veh	0.7	0.0	1.6	0.0	14.2	0.0	6.0	0.0	0.0	0.0	0.1	216.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	4.7	0.0	1.6	0.0	9.0	0.0	1.0	0.0	0.4	26.9
LnGrp Delay(d),s/veh	21.0	0.0	24.1	0.0	57.0	0.0	39.6	0.0	13.0	0.0	29.2	252.5
LnGrp LOS	C		C		E		D		B		C	F
Approach Vol, veh/h		598			54			772			479	
Approach Delay, s/veh		23.5			57.0			37.0			242.2	
Approach LOS		C			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		35.9	24.6	22.0		7.5		46.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0	23.0	18.0		16.0		45.0
Max Q Clear Time (g_c+I1), s		13.7	19.6	20.0		4.6		4.0
Green Ext Time (p_c), s		0.9	1.0	0.0		0.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	84.9
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	130	840	30	60	400
Future Vol, veh/h	10	130	840	30	60	400
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	141	913	33	65	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1313	509	0	0	982	0
Stage 1	965	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	150	509	-	-	699	-
Stage 1	330	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	126	489	-	-	699	-
Mov Cap-2 Maneuver	126	-	-	-	-	-
Stage 1	317	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	406	699	-
HCM Lane V/C Ratio	-	-	0.375	0.093	-
HCM Control Delay (s)	-	-	19.1	10.7	0.5
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	1.7	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	90	110	30	130	30	190	810	10	10	310	30
Future Volume (veh/h)	80	90	110	30	130	30	190	810	10	10	310	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	98	120	33	141	33	207	880	11	11	337	33
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	158	168	91	348	75	248	1969	25	19	1369	133
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.14	0.55	0.55	0.01	0.42	0.42
Sat Flow, veh/h	384	607	643	172	1334	286	1774	3578	45	1774	3251	316
Grp Volume(v), veh/h	305	0	0	207	0	0	207	435	456	11	182	188
Grp Sat Flow(s),veh/h/ln	1634	0	0	1791	0	0	1774	1770	1853	1774	1770	1798
Q Serve(g_s), s	6.4	0.0	0.0	0.0	0.0	0.0	10.2	13.2	13.2	0.6	6.0	6.1
Cycle Q Clear(g_c), s	14.7	0.0	0.0	8.3	0.0	0.0	10.2	13.2	13.2	0.6	6.0	6.1
Prop In Lane	0.29		0.39	0.16		0.16	1.00		0.02	1.00		0.18
Lane Grp Cap(c), veh/h	478	0	0	514	0	0	248	974	1020	19	745	757
V/C Ratio(X)	0.64	0.00	0.00	0.40	0.00	0.00	0.83	0.45	0.45	0.58	0.24	0.25
Avail Cap(c_a), veh/h	590	0	0	637	0	0	394	974	1020	79	745	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	0.0	27.6	0.0	0.0	37.7	12.1	12.1	44.3	16.8	16.8
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.5	0.0	0.0	8.4	1.5	1.4	25.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	0.0	4.3	0.0	0.0	5.6	6.8	7.1	0.4	3.0	3.2
LnGrp Delay(d),s/veh	31.4	0.0	0.0	28.1	0.0	0.0	46.1	13.6	13.5	69.4	17.6	17.6
LnGrp LOS	C			C			D	B	B	E	B	B
Approach Vol, veh/h		305			207			1098			381	
Approach Delay, s/veh		31.4			28.1			19.7			19.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	55.5		29.5	16.6	43.9		29.5
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	40.0		30.0	20.0	24.0		30.0
Max Q Clear Time (g_c+I1), s	2.6	15.2		16.7	12.2	8.1		10.3
Green Ext Time (p_c), s	0.0	5.6		1.9	0.4	4.9		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	100	900	80	70	370
Future Vol, veh/h	20	100	900	80	70	370
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	109	978	87	76	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1386	544	0	0	1076	0
Stage 1	1033	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	134	483	-	-	644	-
Stage 1	304	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	117	477	-	-	644	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	300	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.3	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	315	644	-
HCM Lane V/C Ratio	-	-	0.414	0.118	-
HCM Control Delay (s)	-	-	24.3	11.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	2	0.4	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	20	40	0	20	60	40	540	0	30	210	60
Future Vol, veh/h	50	20	40	0	20	60	40	540	0	30	210	60
Conflicting Peds, #/hr	3	0	12	12	0	3	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	22	43	0	22	65	43	587	0	33	228	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	973	243	1015	973	593	231	0	0	590	0	0
Stage 1	296	296	-	677	677	-	-	-	-	-	-	-
Stage 2	720	677	-	338	296	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	216	252	796	217	252	506	1337	-	-	985	-	-
Stage 1	712	668	-	443	452	-	-	-	-	-	-	-
Stage 2	419	452	-	676	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	234	786	179	234	503	1325	-	-	983	-	-
Mov Cap-2 Maneuver	165	234	-	179	234	-	-	-	-	-	-	-
Stage 1	687	643	-	427	436	-	-	-	-	-	-	-
Stage 2	334	436	-	591	643	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.9	16.8	0.5	0.9
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1325	-	-	250	391	983	-	-
HCM Lane V/C Ratio	0.033	-	-	0.478	0.222	0.033	-	-
HCM Control Delay (s)	7.8	-	-	31.9	16.8	8.8	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.4	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	530	0	10	230
Future Vol, veh/h	0	10	530	0	10	230
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	576	0	11	250

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	856	584	0	0	584	0
Stage 1	584	-	-	-	-	-
Stage 2	272	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	328	512	-	-	991	-
Stage 1	557	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	321	507	-	-	991	-
Mov Cap-2 Maneuver	432	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	991	-
HCM Lane V/C Ratio	-	-	0.021	0.011	-
HCM Control Delay (s)	-	-	12.3	8.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	22.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	30	70	10	80	20	230	500	10	10	160	60
Future Vol, veh/h	10	30	70	10	80	20	230	500	10	10	160	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	33	76	11	87	22	250	543	11	11	174	65
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.9	11.4	28.1	13.1
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	9%	9%	100%	0%
Vol Thru, %	0%	98%	27%	73%	0%	73%
Vol Right, %	0%	2%	64%	18%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	510	110	110	10	220
LT Vol	230	0	10	10	10	0
Through Vol	0	500	30	80	0	160
RT Vol	0	10	70	20	0	60
Lane Flow Rate	250	554	120	120	11	239
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.429	0.87	0.207	0.216	0.021	0.411
Departure Headway (Hd)	6.173	5.653	6.234	6.496	6.882	6.18
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	583	643	574	551	519	581
Service Time	3.916	3.396	4.297	4.559	4.643	3.94
HCM Lane V/C Ratio	0.429	0.862	0.209	0.218	0.021	0.411
HCM Control Delay	13.5	34.7	10.9	11.4	9.8	13.2
HCM Lane LOS	B	D	B	B	A	B
HCM 95th-tile Q	2.1	10.1	0.8	0.8	0.1	2

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	20	10	10	30	20	40	90	0	0	0	0
Future Vol, veh/h	10	20	10	10	30	20	40	90	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	22	11	11	33	22	43	98	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	7.5	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	31%	25%	17%
Vol Thru, %	69%	50%	50%
Vol Right, %	0%	25%	33%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	130	40	60
LT Vol	40	10	10
Through Vol	90	20	30
RT Vol	0	10	20
Lane Flow Rate	141	43	65
Geometry Grp	1	1	1
Degree of Util (X)	0.164	0.05	0.073
Departure Headway (Hd)	4.184	4.134	4.05
Convergence, Y/N	Yes	Yes	Yes
Cap	852	853	871
Service Time	2.233	2.223	2.135
HCM Lane V/C Ratio	0.165	0.05	0.075
HCM Control Delay	8.1	7.4	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	0.2

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	10	10	0	10	20	10	360	0	0	170	10
Future Vol, veh/h	20	10	10	0	10	20	10	360	0	0	170	10
Conflicting Peds, #/hr	5	0	3	3	0	5	3	0	19	19	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	11	11	0	11	22	11	391	0	0	185	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	627	625	196	636	631	415	199	0	0	410	0	0
Stage 1	193	193	-	432	432	-	-	-	-	-	-	-
Stage 2	434	432	-	204	199	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	396	401	845	391	398	637	1373	-	-	1149	-	-
Stage 1	809	741	-	602	582	-	-	-	-	-	-	-
Stage 2	600	582	-	798	736	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	368	387	840	366	384	620	1369	-	-	1143	-	-
Mov Cap-2 Maneuver	368	387	-	366	384	-	-	-	-	-	-	-
Stage 1	798	739	-	583	564	-	-	-	-	-	-	-
Stage 2	559	564	-	774	734	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	12.5	0.2	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1369	-	-	434	515	1143	-	-
HCM Lane V/C Ratio	0.008	-	-	0.1	0.063	-	-	-
HCM Control Delay (s)	7.7	0	-	14.2	12.5	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	110	0	20	170	60	20	100	30	20	70	10
Future Vol, veh/h	20	110	0	20	170	60	20	100	30	20	70	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	120	0	22	185	65	22	109	33	22	76	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	10.3	9.5	9.1
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	15%	8%	20%
Vol Thru, %	67%	85%	68%	70%
Vol Right, %	20%	0%	24%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	150	130	250	100
LT Vol	20	20	20	20
Through Vol	100	110	170	70
RT Vol	30	0	60	10
Lane Flow Rate	163	141	272	109
Geometry Grp	1	1	1	1
Degree of Util (X)	0.225	0.195	0.352	0.154
Departure Headway (Hd)	4.966	4.975	4.664	5.114
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	717	715	766	695
Service Time	3.04	3.047	2.725	3.195
HCM Lane V/C Ratio	0.227	0.197	0.355	0.157
HCM Control Delay	9.5	9.3	10.3	9.1
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.9	0.7	1.6	0.5

Intersection	
Intersection Delay, s/veh	16.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	150	0	20	220	130	20	230	40	70	110	20
Future Vol, veh/h	20	150	0	20	220	130	20	230	40	70	110	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	163	0	22	239	141	22	250	43	76	120	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.9	19.3	16.3	13.7
HCM LOS	B	C	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	12%	5%	35%
Vol Thru, %	79%	88%	59%	55%
Vol Right, %	14%	0%	35%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	170	370	200
LT Vol	20	20	20	70
Through Vol	230	150	220	110
RT Vol	40	0	130	20
Lane Flow Rate	315	185	402	217
Geometry Grp	1	1	1	1
Degree of Util (X)	0.541	0.335	0.653	0.391
Departure Headway (Hd)	6.173	6.52	5.844	6.469
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	583	551	615	554
Service Time	4.226	4.581	3.894	4.528
HCM Lane V/C Ratio	0.54	0.336	0.654	0.392
HCM Control Delay	16.3	12.9	19.3	13.7
HCM Lane LOS	C	B	C	B
HCM 95th-tile Q	3.2	1.5	4.8	1.8

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

02/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	90	80	130	60	390	30	540	570	340	700	110
Future Volume (veh/h)	100	90	80	130	60	390	30	540	570	340	700	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	98	87	141	0	467	33	587	620	370	761	120
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	105	93	229	0	426	85	623	549	400	1618	255
Arrive On Green	0.17	0.17	0.17	0.13	0.00	0.13	0.05	0.35	0.35	0.23	0.53	0.53
Sat Flow, veh/h	671	603	535	1774	0	3293	1774	1770	1559	1774	3058	482
Grp Volume(v), veh/h	294	0	0	141	0	467	33	587	620	370	440	441
Grp Sat Flow(s),veh/h/ln	1809	0	0	1774	0	1647	1774	1770	1559	1774	1770	1770
Q Serve(g_s), s	24.1	0.0	0.0	11.3	0.0	19.4	2.7	48.2	52.8	30.6	23.4	23.4
Cycle Q Clear(g_c), s	24.1	0.0	0.0	11.3	0.0	19.4	2.7	48.2	52.8	30.6	23.4	23.4
Prop In Lane	0.37		0.30	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	314	0	0	229	0	426	85	623	549	400	937	937
V/C Ratio(X)	0.94	0.00	0.00	0.61	0.00	1.10	0.39	0.94	1.13	0.93	0.47	0.47
Avail Cap(c_a), veh/h	314	0	0	229	0	426	85	623	549	400	937	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.49	0.49	0.49	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	0.0	0.0	61.8	0.0	65.3	69.3	47.1	48.6	56.9	22.1	22.1
Incr Delay (d2), s/veh	37.1	0.0	0.0	11.7	0.0	72.2	0.5	14.8	70.0	26.8	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	0.0	6.3	0.0	13.1	1.3	26.0	33.4	18.0	11.8	11.8
LnGrp Delay(d),s/veh	98.3	0.0	0.0	73.5	0.0	137.5	69.8	61.9	118.6	83.7	23.8	23.8
LnGrp LOS	F			E		F	E	E	F	F	C	C
Approach Vol, veh/h		294			608			1240			1251	
Approach Delay, s/veh		98.3			122.7			90.5			41.5	
Approach LOS		F			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.0	57.4		30.6	11.4	84.0		24.0
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	33.8	* 53		26.0	7.2	* 79		19.4
Max Q Clear Time (g_c+I1), s	32.6	54.8		26.1	4.7	25.4		21.4
Green Ext Time (p_c), s	0.1	0.0		0.0	0.3	2.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	78.9
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	710	290	80	420	210	200	490	50	330	480	90
Future Volume (veh/h)	620	710	290	80	420	210	200	490	50	330	480	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	674	772	315	87	457	228	217	533	54	359	522	98
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	733	1396	618	111	796	353	244	743	75	415	632	118
Arrive On Green	0.21	0.39	0.39	0.06	0.22	0.22	0.14	0.23	0.23	0.12	0.21	0.21
Sat Flow, veh/h	3442	3539	1566	1845	3539	1571	1774	3241	327	3442	2974	556
Grp Volume(v), veh/h	674	772	315	87	457	228	217	290	297	359	310	310
Grp Sat Flow(s),veh/h/ln	1721	1770	1566	1845	1770	1571	1774	1770	1799	1721	1770	1761
Q Serve(g_s), s	23.0	20.3	18.3	5.6	13.8	15.8	14.4	18.1	18.3	12.3	20.0	20.2
Cycle Q Clear(g_c), s	23.0	20.3	18.3	5.6	13.8	15.8	14.4	18.1	18.3	12.3	20.0	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.32
Lane Grp Cap(c), veh/h	733	1396	618	111	796	353	244	406	413	415	376	374
V/C Ratio(X)	0.92	0.55	0.51	0.79	0.57	0.65	0.89	0.72	0.72	0.86	0.82	0.83
Avail Cap(c_a), veh/h	774	1396	618	169	796	353	266	442	450	459	413	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.97	0.97	0.97	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	46.2	28.1	27.5	55.6	41.4	42.2	50.9	42.6	42.7	51.8	45.1	45.2
Incr Delay (d2), s/veh	15.1	1.6	3.0	5.8	2.9	8.5	25.9	4.9	5.0	12.0	10.4	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	10.2	8.4	3.0	7.0	7.7	8.8	9.4	9.6	6.5	10.9	11.0
LnGrp Delay(d),s/veh	61.3	29.7	30.5	61.5	44.3	50.7	76.8	47.6	47.7	63.8	55.4	56.1
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1761			772			804			979	
Approach Delay, s/veh		41.9			48.1			55.5			58.7	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	53.3	20.5	31.5	31.5	33.0	18.5	33.5
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	11.0	43.0	18.0	28.0	27.0	* 27	16.0	30.0
Max Q Clear Time (g_c+I1), s	7.6	22.3	16.4	22.2	25.0	17.8	14.3	20.3
Green Ext Time (p_c), s	0.0	7.7	0.1	2.6	0.5	2.2	0.2	3.6

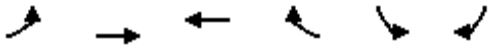
Intersection Summary	
HCM 2010 Ctrl Delay	49.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	140	70	90	60	80	30	590	70	90	750	40
Future Volume (veh/h)	50	140	70	90	60	80	30	590	70	90	750	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	152	76	98	65	87	33	641	76	98	815	43
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	366	167	242	164	187	44	818	690	125	902	754
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.02	0.29	0.29	0.07	0.48	0.48
Sat Flow, veh/h	243	1024	468	520	459	523	1774	1863	1573	1774	1863	1557
Grp Volume(v), veh/h	282	0	0	250	0	0	33	641	76	98	815	43
Grp Sat Flow(s),veh/h/ln	1735	0	0	1502	0	0	1774	1863	1573	1774	1863	1557
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	1.7	28.4	3.2	4.9	36.1	1.3
Cycle Q Clear(g_c), s	10.4	0.0	0.0	11.1	0.0	0.0	1.7	28.4	3.2	4.9	36.1	1.3
Prop In Lane	0.19		0.27	0.39		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	668	0	0	592	0	0	44	818	690	125	902	754
V/C Ratio(X)	0.42	0.00	0.00	0.42	0.00	0.00	0.75	0.78	0.11	0.78	0.90	0.06
Avail Cap(c_a), veh/h	668	0	0	592	0	0	79	911	769	177	1014	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.39	0.39	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	21.9	0.0	0.0	44.0	27.9	18.9	41.2	21.3	12.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.2	0.0	0.0	9.2	1.6	0.0	13.7	10.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	5.1	0.0	0.0	0.9	15.0	1.4	2.9	20.9	0.6
LnGrp Delay(d),s/veh	23.9	0.0	0.0	24.1	0.0	0.0	53.2	29.5	19.0	54.8	31.7	12.3
LnGrp LOS	C			C			D	C	B	D	C	B
Approach Vol, veh/h		282			250			750			956	
Approach Delay, s/veh		23.9			24.1			29.5			33.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	43.5		36.2	6.2	47.6		36.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	44.0		25.0	4.0	49.0		25.0
Max Q Clear Time (g_c+I1), s	6.9	30.4		12.4	3.7	38.1		13.1
Green Ext Time (p_c), s	0.0	6.3		1.9	0.0	5.5		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	770	560	10	150	110
Future Volume (veh/h)	120	770	560	10	150	110
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	130	837	609	11	142	143
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	167	2807	2340	42	209	190
Arrive On Green	0.09	0.79	0.88	0.88	0.12	0.12
Sat Flow, veh/h	1845	3632	3648	64	1774	1615
Grp Volume(v), veh/h	130	837	303	317	142	143
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1849	1774	1615
Q Serve(g_s), s	6.2	5.8	2.5	2.5	6.9	7.7
Cycle Q Clear(g_c), s	6.2	5.8	2.5	2.5	6.9	7.7
Prop In Lane	1.00			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	167	2807	1165	1217	209	190
V/C Ratio(X)	0.78	0.30	0.26	0.26	0.68	0.75
Avail Cap(c_a), veh/h	369	2807	1165	1217	434	395
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	40.0	2.5	2.1	2.1	38.1	38.4
Incr Delay (d2), s/veh	5.5	0.2	0.5	0.5	3.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.9	1.3	1.3	3.6	7.0
LnGrp Delay(d),s/veh	45.5	2.7	2.6	2.6	41.9	44.3
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		967	620		285	
Approach Delay, s/veh		8.5	2.6		43.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.4		14.6	12.1	63.2		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		60.0		22.0	18.0	38.0		
Max Q Clear Time (g_c+I1), s		7.8		9.7	8.2	4.5		
Green Ext Time (p_c), s		8.1		0.9	0.3	7.8		

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	750	120	30	470	20	80	40	30	60	30	70
Future Volume (veh/h)	80	750	120	30	470	20	80	40	30	60	30	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.97	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	87	815	130	33	511	22	87	43	33	65	33	76
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	2019	322	46	2156	93	155	75	43	212	95	279
Arrive On Green	0.12	1.00	1.00	0.05	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1845	3055	487	1845	3452	148	519	415	237	806	525	1544
Grp Volume(v), veh/h	87	472	473	33	262	271	163	0	0	98	0	76
Grp Sat Flow(s),veh/h/ln	1845	1770	1773	1845	1770	1831	1171	0	0	1331	0	1544
Q Serve(g_s), s	4.1	0.0	0.0	1.6	0.0	0.0	7.3	0.0	0.0	0.0	0.0	3.8
Cycle Q Clear(g_c), s	4.1	0.0	0.0	1.6	0.0	0.0	13.0	0.0	0.0	5.7	0.0	3.8
Prop In Lane	1.00		0.27	1.00		0.08	0.53		0.20	0.66		1.00
Lane Grp Cap(c), veh/h	113	1169	1172	46	1105	1143	273	0	0	307	0	279
V/C Ratio(X)	0.77	0.40	0.40	0.72	0.24	0.24	0.60	0.00	0.00	0.32	0.00	0.27
Avail Cap(c_a), veh/h	267	1169	1172	144	1105	1143	402	0	0	432	0	412
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	0.0	0.0	42.4	0.0	0.0	36.4	0.0	0.0	32.4	0.0	31.8
Incr Delay (d2), s/veh	9.8	1.0	1.0	17.8	0.5	0.5	2.1	0.0	0.0	0.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.3	0.3	1.0	0.1	0.1	4.1	0.0	0.0	2.2	0.0	1.7
LnGrp Delay(d),s/veh	48.6	1.0	1.0	60.3	0.5	0.5	38.5	0.0	0.0	33.0	0.0	32.3
LnGrp LOS	D	A	A	E	A	A	D			C		C
Approach Vol, veh/h		1032			566			163			174	
Approach Delay, s/veh		5.0			4.0			38.5			32.7	
Approach LOS		A			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.5		20.3	9.5	60.2		20.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	47.0		24.0	13.0	41.0		24.0
Max Q Clear Time (g_c+I1), s	3.6	2.0		7.7	6.1	2.0		15.0
Green Ext Time (p_c), s	0.0	7.5		1.8	0.1	7.4		1.3

Intersection Summary		
HCM 2010 Ctrl Delay		10.0
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	520	60	30	320	70	70	210	20	120	240	110
Future Volume (veh/h)	60	520	60	30	320	70	70	210	20	120	240	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	65	565	65	33	348	76	76	228	22	130	261	120
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	1498	172	46	1289	277	98	385	318	164	313	144
Arrive On Green	0.09	0.94	0.94	0.05	0.90	0.90	0.06	0.21	0.21	0.09	0.25	0.25
Sat Flow, veh/h	1845	3187	366	1845	2869	617	1774	1863	1536	1774	1251	575
Grp Volume(v), veh/h	65	313	317	33	213	211	76	228	22	130	0	381
Grp Sat Flow(s),veh/h/ln	1845	1770	1782	1845	1770	1717	1774	1863	1536	1774	0	1826
Q Serve(g_s), s	3.1	1.5	1.5	1.6	1.4	1.5	3.8	10.0	1.0	6.5	0.0	17.8
Cycle Q Clear(g_c), s	3.1	1.5	1.5	1.6	1.4	1.5	3.8	10.0	1.0	6.5	0.0	17.8
Prop In Lane	1.00		0.21	1.00		0.36	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	84	832	838	46	795	771	98	385	318	164	0	456
V/C Ratio(X)	0.77	0.38	0.38	0.72	0.27	0.27	0.78	0.59	0.07	0.79	0.00	0.83
Avail Cap(c_a), veh/h	164	832	838	103	795	771	177	455	375	306	0	588
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.94	0.94	0.94	1.00	1.00	1.00	0.75	0.00	0.75
Uniform Delay (d), s/veh	40.4	1.5	1.5	42.4	2.6	2.6	42.0	32.3	28.7	40.0	0.0	32.0
Incr Delay (d2), s/veh	12.6	1.2	1.2	17.6	0.8	0.8	12.3	1.5	0.1	6.3	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.8	0.8	1.0	0.8	0.8	2.2	5.3	0.5	3.5	0.0	9.8
LnGrp Delay(d),s/veh	53.0	2.7	2.7	60.1	3.4	3.4	54.2	33.7	28.8	46.3	0.0	38.2
LnGrp LOS	D	A	A	E	A	A	D	C	C	D		D
Approach Vol, veh/h		695			457			326			511	
Approach Delay, s/veh		7.4			7.5			38.2			40.2	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	48.3	9.0	26.5	8.1	46.4	12.8	22.6
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	5.0	29.0	9.0	29.0	8.0	26.0	15.5	22.0
Max Q Clear Time (g_c+I1), s	3.6	3.5	5.8	19.8	5.1	3.5	8.5	12.0
Green Ext Time (p_c), s	0.0	4.5	0.0	2.7	0.0	4.4	0.2	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	380	40	50	250	50	10	20	30	90	130	250
Future Volume (veh/h)	260	380	40	50	250	50	10	20	30	90	130	250
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1863	1863	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	283	413	43	54	272	54	11	22	33	98	141	272
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	1450	150	69	925	180	19	183	274	125	190	366
Arrive On Green	0.34	0.90	0.90	0.04	0.32	0.32	0.01	0.26	0.26	0.07	0.32	0.32
Sat Flow, veh/h	1845	3220	333	1774	2920	568	1774	696	1044	1774	589	1136
Grp Volume(v), veh/h	283	226	230	54	163	163	11	0	55	98	0	413
Grp Sat Flow(s),veh/h/ln	1845	1770	1783	1774	1770	1718	1774	0	1740	1774	0	1725
Q Serve(g_s), s	13.0	1.5	1.6	2.7	6.2	6.5	0.6	0.0	2.2	4.9	0.0	19.2
Cycle Q Clear(g_c), s	13.0	1.5	1.6	2.7	6.2	6.5	0.6	0.0	2.2	4.9	0.0	19.2
Prop In Lane	1.00		0.19	1.00		0.33	1.00		0.60	1.00		0.66
Lane Grp Cap(c), veh/h	318	797	803	69	561	544	19	0	457	125	0	556
V/C Ratio(X)	0.89	0.28	0.29	0.78	0.29	0.30	0.58	0.00	0.12	0.78	0.00	0.74
Avail Cap(c_a), veh/h	451	797	803	138	561	544	79	0	457	197	0	556
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.92	0.92	0.92	1.00	0.00	1.00	0.46	0.00	0.46
Uniform Delay (d), s/veh	28.7	2.5	2.5	42.9	23.1	23.2	44.3	0.0	25.3	41.1	0.0	27.2
Incr Delay (d2), s/veh	13.5	0.8	0.8	16.0	1.2	1.3	25.0	0.0	0.5	4.9	0.0	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.8	0.8	1.6	3.2	3.2	0.4	0.0	1.1	2.6	0.0	9.7
LnGrp Delay(d),s/veh	42.2	3.3	3.3	58.8	24.3	24.5	69.4	0.0	25.8	46.0	0.0	31.3
LnGrp LOS	D	A	A	E	C	C	E		C	D		C
Approach Vol, veh/h		739			380			66			511	
Approach Delay, s/veh		18.2			29.3			33.1			34.1	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	32.5	5.0	33.0	7.5	44.5	10.3	27.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	19.0	4.0	29.0	7.0	34.0	10.0	23.0
Max Q Clear Time (g_c+I1), s	15.0	8.5	2.6	21.2	4.7	3.6	6.9	4.2
Green Ext Time (p_c), s	0.5	3.4	0.0	1.9	0.0	5.1	0.1	3.2

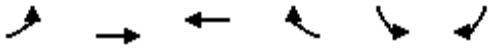
Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	420	100	90	270	70	120	450	90	100	670	10
Future Volume (veh/h)	30	420	100	90	270	70	120	450	90	100	670	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.91	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	457	109	98	293	76	130	489	98	109	728	11
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	982	232	124	894	226	160	848	169	137	989	15
Arrive On Green	0.07	0.35	0.35	0.07	0.33	0.33	0.09	0.29	0.29	0.08	0.28	0.28
Sat Flow, veh/h	1774	2789	658	1774	2739	691	1774	2922	582	1774	3568	54
Grp Volume(v), veh/h	33	288	278	98	186	183	130	295	292	109	361	378
Grp Sat Flow(s),veh/h/ln	1774	1770	1677	1774	1770	1661	1774	1770	1734	1774	1770	1852
Q Serve(g_s), s	1.7	12.0	12.2	5.2	7.5	7.9	6.8	13.5	13.7	5.7	17.6	17.6
Cycle Q Clear(g_c), s	1.7	12.0	12.2	5.2	7.5	7.9	6.8	13.5	13.7	5.7	17.6	17.6
Prop In Lane	1.00		0.39	1.00		0.42	1.00		0.34	1.00		0.03
Lane Grp Cap(c), veh/h	133	623	591	124	577	542	160	514	503	137	491	513
V/C Ratio(X)	0.25	0.46	0.47	0.79	0.32	0.34	0.81	0.57	0.58	0.80	0.74	0.74
Avail Cap(c_a), veh/h	133	623	591	149	577	542	168	577	566	149	559	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	41.4	23.8	23.9	43.5	24.1	24.2	42.4	28.7	28.8	43.1	31.2	31.2
Incr Delay (d2), s/veh	0.9	2.3	2.5	20.6	1.5	1.7	24.5	1.1	1.2	21.9	4.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.2	6.0	3.2	3.9	3.9	4.4	6.7	6.7	3.6	9.2	9.6
LnGrp Delay(d),s/veh	42.3	26.1	26.4	64.1	25.6	25.9	67.0	29.8	30.0	65.0	35.2	35.0
LnGrp LOS	D	C	C	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		599			467			717			848	
Approach Delay, s/veh		27.1			33.8			36.6			38.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	39.5	12.6	32.3	13.1	37.0	11.3	33.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	8.0	28.0	9.0	30.0	5.0	* 31	8.0	31.0
Max Q Clear Time (g_c+I1), s	7.2	14.2	8.8	19.6	3.7	9.9	7.7	15.7
Green Ext Time (p_c), s	0.0	2.2	0.0	4.2	0.0	1.3	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

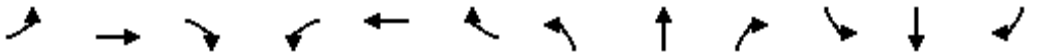
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	660	430	200	280	70
Future Volume (veh/h)	40	660	430	200	280	70
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	43	717	467	217	304	76
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	55	2505	2239	1318	361	335
Arrive On Green	0.03	0.71	0.63	0.63	0.20	0.20
Sat Flow, veh/h	1774	3632	3632	1575	1774	1647
Grp Volume(v), veh/h	43	717	467	217	304	76
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1575	1774	1647
Q Serve(g_s), s	2.2	6.7	5.0	2.4	14.8	3.5
Cycle Q Clear(g_c), s	2.2	6.7	5.0	2.4	14.8	3.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	55	2505	2239	1318	361	335
V/C Ratio(X)	0.79	0.29	0.21	0.16	0.84	0.23
Avail Cap(c_a), veh/h	197	2505	2239	1318	749	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	43.3	4.8	7.0	1.4	34.5	29.9
Incr Delay (d2), s/veh	21.7	0.3	0.2	0.3	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.3	2.5	2.4	7.8	3.4
LnGrp Delay(d),s/veh	65.0	5.1	7.2	1.7	39.8	30.3
LnGrp LOS	E	A	A	A	D	C
Approach Vol, veh/h		760	684		380	
Approach Delay, s/veh		8.5	5.4		37.9	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.7		22.3	6.8	60.9		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		44.0		38.0	10.0	30.0		
Max Q Clear Time (g_c+I1), s		8.7		16.8	4.2	7.0		
Green Ext Time (p_c), s		7.6		1.5	0.0	6.9		

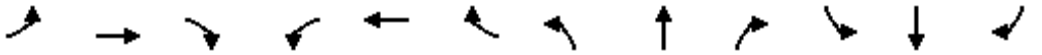
Intersection Summary	
HCM 2010 Ctrl Delay	13.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	460	440	180	280	0	310	0	140	0	0	0
Future Volume (vph)	0	460	440	180	280	0	310	0	140	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95	1.00	1.00	0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00	0.97	1.00	1.00		1.00	1.00	0.97			
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Frt		1.00	0.85	1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3539	1386	1770	3539		1625	1681	1440			
Flt Permitted		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3539	1386	1770	3539		1625	1681	1440			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	500	478	196	304	0	337	0	152	0	0	0
RTOR Reduction (vph)	0	0	144	0	0	0	0	0	124	0	0	0
Lane Group Flow (vph)	0	500	334	196	304	0	168	169	28	0	0	0
Confl. Peds. (#/hr)	5		15			5			8			
Confl. Bikes (#/hr)						1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)		46.6	62.9	15.1	65.7		16.3	16.3	16.3			
Effective Green, g (s)		46.6	62.9	15.1	65.7		16.3	16.3	16.3			
Actuated g/C Ratio		0.52	0.70	0.17	0.73		0.18	0.18	0.18			
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		1832	1030	296	2583		294	304	260			
v/s Ratio Prot		0.14	c0.06	c0.11	0.09		c0.10	0.10				
v/s Ratio Perm			0.18						0.02			
v/c Ratio		0.27	0.32	0.66	0.12		0.57	0.56	0.11			
Uniform Delay, d1		12.2	5.3	35.1	3.6		33.7	33.6	30.8			
Progression Factor		1.05	4.74	1.24	0.86		1.00	1.00	1.00			
Incremental Delay, d2		0.4	0.2	5.5	0.1		2.7	2.2	0.2			
Delay (s)		13.2	25.2	49.1	3.2		36.3	35.8	30.9			
Level of Service		B	C	D	A		D	D	C			
Approach Delay (s)		19.0			21.2			34.5			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	520	10	20	310	20	30	0	50	20	0	0
Future Volume (veh/h)	20	520	10	20	310	20	30	0	50	20	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	0.99		0.98	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	22	565	11	22	337	22	33	0	54	22	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	2495	49	33	2272	148	232	0	157	190	0	160
Arrive On Green	0.09	1.00	1.00	0.02	0.67	0.67	0.10	0.00	0.10	0.10	0.00	0.00
Sat Flow, veh/h	1774	3550	69	1774	3368	219	1507	0	1555	1097	0	1583
Grp Volume(v), veh/h	22	281	295	22	176	183	33	0	54	22	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1850	1774	1770	1818	1507	0	1555	1097	0	1583
Q Serve(g_s), s	1.0	0.0	0.0	1.1	3.2	3.3	0.0	0.0	2.9	1.4	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.1	3.2	3.3	1.6	0.0	2.9	3.0	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	1243	1300	33	1194	1226	232	0	157	190	0	160
V/C Ratio(X)	0.26	0.23	0.23	0.66	0.15	0.15	0.14	0.00	0.34	0.12	0.00	0.00
Avail Cap(c_a), veh/h	256	1243	1300	177	1194	1226	586	0	553	528	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.75	0.75	0.75	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	43.9	5.3	5.3	37.1	0.0	37.7	38.4	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.4	0.4	15.3	0.2	0.2	0.3	0.0	1.3	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.7	1.6	1.7	0.8	0.0	1.3	0.5	0.0	0.0
LnGrp Delay(d),s/veh	40.9	0.4	0.4	59.2	5.5	5.5	37.4	0.0	39.0	38.7	0.0	0.0
LnGrp LOS	D	A	A	E	A	A	D		D	D		
Approach Vol, veh/h		598			381			87			22	
Approach Delay, s/veh		1.9			8.6			38.4			38.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	69.2		15.1	8.2	66.7		15.1
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	9.0	33.0		32.0	13.0	29.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	2.0		5.0	3.0	5.3		4.9
Green Ext Time (p_c), s	0.0	3.7		0.4	0.0	3.6		0.4

Intersection Summary		
HCM 2010 Ctrl Delay	7.9	
HCM 2010 LOS	A	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	30	50	380	160	90	20	400	10	20	270	50
Future Volume (veh/h)	70	30	50	380	160	90	20	400	10	20	270	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	76	33	54	413	174	98	22	435	11	22	293	54
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	457	180	778	605	551	311	79	537	13	83	457	81
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	710	366	1580	1303	1119	631	42	1812	45	53	1541	273
Grp Volume(v), veh/h	109	0	54	413	0	272	468	0	0	369	0	0
Grp Sat Flow(s),veh/h/ln	1077	0	1580	1303	0	1750	1898	0	0	1867	0	0
Q Serve(g_s), s	1.8	0.0	1.0	16.7	0.0	5.3	3.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	1.0	23.8	0.0	5.3	13.0	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.70		1.00	1.00		0.36	0.05		0.02	0.06		0.15
Lane Grp Cap(c), veh/h	638	0	778	605	0	862	629	0	0	620	0	0
V/C Ratio(X)	0.17	0.00	0.07	0.68	0.00	0.32	0.74	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	638	0	778	605	0	862	732	0	0	719	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	7.6	16.7	0.0	8.7	18.6	0.0	0.0	17.5	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.2	6.1	0.0	1.0	3.5	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.5	7.0	0.0	2.8	7.4	0.0	0.0	5.2	0.0	0.0
LnGrp Delay(d),s/veh	9.9	0.0	7.7	22.8	0.0	9.6	22.1	0.0	0.0	18.5	0.0	0.0
LnGrp LOS	A		A	C		A	C			B		
Approach Vol, veh/h		163			685			468			369	
Approach Delay, s/veh		9.2			17.6			22.1			18.5	
Approach LOS		A			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		22.8		34.0		22.8
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		28.0		20.0		28.0		20.0
Max Q Clear Time (g_c+I1), s		9.1		11.7		25.8		15.0
Green Ext Time (p_c), s		4.0		2.5		1.0		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	60	490	690	10	80	10	360	0	0	20
Future Volume (veh/h)	10	20	60	490	690	10	80	10	360	0	0	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1976	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	22	65	533	750	11	87	11	391	0	0	22
Adj No. of Lanes	1	1	0	1	1	0	0	1	2	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	104	308	577	1038	15	281	36	1399	0	0	101
Arrive On Green	0.01	0.25	0.25	0.33	0.57	0.57	0.18	0.18	0.18	0.00	0.00	0.07
Sat Flow, veh/h	1774	414	1222	1774	1831	27	1583	200	2771	0	0	1520
Grp Volume(v), veh/h	11	0	87	533	0	761	98	0	391	0	0	22
Grp Sat Flow(s),veh/h/ln	1774	0	1636	1774	0	1858	1784	0	1385	0	0	1520
Q Serve(g_s), s	0.6	0.0	3.8	26.1	0.0	27.0	4.3	0.0	7.3	0.0	0.0	1.2
Cycle Q Clear(g_c), s	0.6	0.0	3.8	26.1	0.0	27.0	4.3	0.0	7.3	0.0	0.0	1.2
Prop In Lane	1.00		0.75	1.00		0.01	0.89		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	19	0	413	577	0	1054	317	0	1399	0	0	101
V/C Ratio(X)	0.58	0.00	0.21	0.92	0.00	0.72	0.31	0.00	0.28	0.00	0.00	0.22
Avail Cap(c_a), veh/h	79	0	413	710	0	1054	317	0	1399	0	0	101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.99	1.00	0.00	1.00	0.72	0.00	0.72	0.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	0.0	26.6	29.3	0.0	14.3	32.2	0.0	12.9	0.0	0.0	39.8
Incr Delay (d2), s/veh	24.8	0.0	1.1	15.7	0.0	4.3	1.8	0.0	0.4	0.0	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.8	15.3	0.0	15.0	2.3	0.0	2.9	0.0	0.0	0.7
LnGrp Delay(d),s/veh	69.1	0.0	27.7	45.0	0.0	18.6	34.0	0.0	13.3	0.0	0.0	44.6
LnGrp LOS	E		C	D		B	C		B			D
Approach Vol, veh/h		98			1294			489			22	
Approach Delay, s/veh		32.4			29.5			17.4			44.6	
Approach LOS		C			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	33.3	26.7		10.0	5.0	55.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	36.0	16.0		6.0	4.0	48.0		16.0
Max Q Clear Time (g_c+I1), s	28.1	5.8		3.2	2.6	29.0		9.3
Green Ext Time (p_c), s	1.2	4.3		0.0	0.0	6.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	110	10	20	120	30	130	70	50	20	170	30
Future Vol, veh/h	40	110	10	20	120	30	130	70	50	20	170	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	120	11	22	130	33	141	76	54	22	185	33
Number of Lanes	0	1	0	0	1	0	1	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	1	1
HCM Control Delay	12	12	10.5	12.7
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	25%	12%	11%	0%
Vol Thru, %	0%	100%	0%	69%	71%	89%	0%
Vol Right, %	0%	0%	100%	6%	18%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	70	50	160	170	190	30
LT Vol	130	0	0	40	20	20	0
Through Vol	0	70	0	110	120	170	0
RT Vol	0	0	50	10	30	0	30
Lane Flow Rate	141	76	54	174	185	207	33
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.259	0.129	0.081	0.31	0.321	0.376	0.052
Departure Headway (Hd)	6.601	6.092	5.381	6.412	6.252	6.561	5.794
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	543	587	663	560	573	547	615
Service Time	4.354	3.846	3.134	4.167	4.006	4.323	3.555
HCM Lane V/C Ratio	0.26	0.129	0.081	0.311	0.323	0.378	0.054
HCM Control Delay	11.7	9.8	8.6	12	12	13.3	8.9
HCM Lane LOS	B	A	A	B	B	B	A
HCM 95th-tile Q	1	0.4	0.3	1.3	1.4	1.7	0.2

Intersection	
Intersection Delay, s/veh	165.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	0	770	0	0	0	0	580	440	190	820	0
Future Vol, veh/h	80	0	770	0	0	0	0	580	440	190	820	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	0	837	0	0	0	0	630	478	207	891	0
Number of Lanes	1	0	2	0	0	0	0	2	1	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	40.9	63.3	374.4
HCM LOS	E	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	0%	41%	0%
Vol Thru, %	100%	100%	0%	0%	0%	0%	59%	100%
Vol Right, %	0%	0%	100%	0%	100%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	290	440	80	385	385	463	547
LT Vol	0	0	0	80	0	0	190	0
Through Vol	290	290	0	0	0	0	273	547
RT Vol	0	0	440	0	385	385	0	0
Lane Flow Rate	315	315	478	87	418	418	504	594
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	0.864	0.864	0.987	0.228	0.957	0.756	1.607	1.861
Departure Headway (Hd)	11.426	11.426	8.939	9.43	8.128	6.372	11.484	11.272
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	318	318	411	387	448	573	317	327
Service Time	9.126	9.126	6.639	7.044	5.828	4.072	9.244	9.032
HCM Lane V/C Ratio	0.991	0.991	1.163	0.225	0.933	0.729	1.59	1.817
HCM Control Delay	56.9	56.9	71.8	14.8	61.1	26.2	315.1	424.6
HCM Lane LOS	F	F	F	B	F	D	F	F
HCM 95th-tile Q	7.8	7.8	11.9	0.9	11.5	6.7	29.9	39.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	90	710	10	30	0	520	50	10	0	30	230
Future Volume (veh/h)	140	90	710	10	30	0	520	50	10	0	30	230
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	152	98	772	11	33	0	565	54	11	0	33	250
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	537	346	1361	14	43	0	551	560	114	0	298	253
Arrive On Green	0.49	0.49	0.49	0.03	0.03	0.00	0.16	0.36	0.36	0.00	0.16	0.16
Sat Flow, veh/h	1099	709	2787	460	1380	0	3442	1556	317	0	1863	1583
Grp Volume(v), veh/h	250	0	772	44	0	0	565	0	65	0	33	250
Grp Sat Flow(s),veh/h/ln	1808	0	1393	1840	0	0	1721	0	1873	0	1863	1583
Q Serve(g_s), s	8.2	0.0	19.6	2.4	0.0	0.0	16.0	0.0	2.3	0.0	1.5	15.8
Cycle Q Clear(g_c), s	8.2	0.0	19.6	2.4	0.0	0.0	16.0	0.0	2.3	0.0	1.5	15.8
Prop In Lane	0.61		1.00	0.25		0.00	1.00		0.17	0.00		1.00
Lane Grp Cap(c), veh/h	883	0	1361	58	0	0	551	0	674	0	298	253
V/C Ratio(X)	0.28	0.00	0.57	0.76	0.00	0.00	1.03	0.00	0.10	0.00	0.11	0.99
Avail Cap(c_a), veh/h	883	0	1361	294	0	0	551	0	674	0	298	253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.78	0.00	0.78	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	18.1	48.0	0.0	0.0	42.0	0.0	21.2	0.0	35.9	41.9
Incr Delay (d2), s/veh	0.8	0.0	1.7	18.1	0.0	0.0	40.6	0.0	0.0	0.0	0.2	52.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	7.8	1.5	0.0	0.0	10.7	0.0	1.2	0.0	0.8	10.6
LnGrp Delay(d),s/veh	16.0	0.0	19.8	66.1	0.0	0.0	82.6	0.0	21.3	0.0	36.1	94.6
LnGrp LOS	B		B	E			F		C		D	F
Approach Vol, veh/h		1022			44			630			283	
Approach Delay, s/veh		18.9			66.1			76.3			87.8	
Approach LOS		B			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		52.8	20.0	20.0		7.2		40.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0	16.0	16.0		16.0		36.0
Max Q Clear Time (g_c+I1), s		21.6	18.0	17.8		4.4		4.3
Green Ext Time (p_c), s		4.4	0.0	0.0		0.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	100	640	50	60	750
Future Vol, veh/h	20	100	640	50	60	750
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	109	696	54	65	815

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1297	411	0	0	786	0
Stage 1	759	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	154	590	-	-	829	-
Stage 1	423	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	127	566	-	-	829	-
Mov Cap-2 Maneuver	127	-	-	-	-	-
Stage 1	406	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.6	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	359	829	-
HCM Lane V/C Ratio	-	-	0.363	0.079	-
HCM Control Delay (s)	-	-	20.6	9.7	0.6
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	80	260	60	80	20	160	560	10	20	670	40
Future Volume (veh/h)	120	80	260	60	80	20	160	560	10	20	670	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	130	87	283	65	87	22	174	609	11	22	728	43
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	108	303	175	222	49	210	1669	30	33	1254	74
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.12	0.47	0.47	0.02	0.37	0.37
Sat Flow, veh/h	373	323	908	359	664	148	1774	3555	64	1774	3391	200
Grp Volume(v), veh/h	500	0	0	174	0	0	174	303	317	22	380	391
Grp Sat Flow(s),veh/h/ln	1604	0	0	1171	0	0	1774	1770	1849	1774	1770	1821
Q Serve(g_s), s	18.2	0.0	0.0	0.0	0.0	0.0	8.6	9.9	9.9	1.1	15.5	15.5
Cycle Q Clear(g_c), s	27.0	0.0	0.0	8.8	0.0	0.0	8.6	9.9	9.9	1.1	15.5	15.5
Prop In Lane	0.26		0.57	0.37		0.13	1.00		0.03	1.00		0.11
Lane Grp Cap(c), veh/h	586	0	0	446	0	0	210	831	868	33	654	674
V/C Ratio(X)	0.85	0.00	0.00	0.39	0.00	0.00	0.83	0.36	0.37	0.66	0.58	0.58
Avail Cap(c_a), veh/h	619	0	0	477	0	0	276	831	868	99	654	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	0.0	22.4	0.0	0.0	38.8	15.3	15.3	43.9	22.8	22.8
Incr Delay (d2), s/veh	10.7	0.0	0.0	0.6	0.0	0.0	14.6	1.2	1.2	20.0	3.7	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	0.0	3.4	0.0	0.0	5.1	5.1	5.3	0.7	8.3	8.5
LnGrp Delay(d),s/veh	39.4	0.0	0.0	23.0	0.0	0.0	53.3	16.5	16.5	63.8	26.5	26.4
LnGrp LOS	D			C			D	B	B	E	C	C
Approach Vol, veh/h		500			174			794			793	
Approach Delay, s/veh		39.4			23.0			24.6			27.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	48.3		36.1	14.7	39.3		36.1
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	37.0		32.0	14.0	28.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	11.9		29.0	10.6	17.5		10.8
Green Ext Time (p_c), s	0.0	6.2		1.0	0.2	4.4		3.3

Intersection Summary		
HCM 2010 Ctrl Delay		28.7
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	70	650	40	110	870
Future Vol, veh/h	20	70	650	40	110	870
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	76	707	43	120	946

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1451	386	0	0	761	0
Stage 1	739	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	122	612	-	-	847	-
Stage 1	433	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	103	605	-	-	847	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	384	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.6	0	1.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	290	847	-
HCM Lane V/C Ratio	-	-	0.337	0.141	-
HCM Control Delay (s)	-	-	23.6	9.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.5	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	30	40	0	10	40	30	250	10	80	480	50
Future Vol, veh/h	70	30	40	0	10	40	30	250	10	80	480	50
Conflicting Peds, #/hr	3	0	12	12	0	3	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	33	43	0	11	43	33	272	11	87	522	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1066	1039	537	1086	1039	278	525	0	0	275	0	0
Stage 1	699	699	-	340	340	-	-	-	-	-	-	-
Stage 2	367	340	-	746	699	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	200	231	544	194	231	761	1042	-	-	1288	-	-
Stage 1	430	442	-	675	639	-	-	-	-	-	-	-
Stage 2	653	639	-	405	442	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	167	207	537	144	207	757	1032	-	-	1285	-	-
Mov Cap-2 Maneuver	167	207	-	144	207	-	-	-	-	-	-	-
Stage 1	415	411	-	651	617	-	-	-	-	-	-	-
Stage 2	584	617	-	317	411	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	52	13.2	0.9	1
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1032	-	-	219	494	1285	-	-
HCM Lane V/C Ratio	0.032	-	-	0.695	0.11	0.068	-	-
HCM Control Delay (s)	8.6	-	-	52	13.2	8	-	-
HCM Lane LOS	A	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.5	0.4	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	250	0	20	430
Future Vol, veh/h	0	10	250	0	20	430
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	272	0	22	467

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	791	280	0	0	280	0
Stage 1	280	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	358	759	-	-	1283	-
Stage 1	767	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	349	752	-	-	1283	-
Mov Cap-2 Maneuver	458	-	-	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	752	1283	-
HCM Lane V/C Ratio	-	-	0.014	0.017	-
HCM Control Delay (s)	-	-	9.9	7.9	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	80	150	10	30	10	70	210	10	20	400	30
Future Vol, veh/h	30	80	150	10	30	10	70	210	10	20	400	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	87	163	11	33	11	76	228	11	22	435	33
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	14.2	10.7	12.9	26.6
HCM LOS	B	B	B	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	12%	20%	100%	0%
Vol Thru, %	0%	95%	31%	60%	0%	93%
Vol Right, %	0%	5%	58%	20%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	70	220	260	50	20	430
LT Vol	70	0	30	10	20	0
Through Vol	0	210	80	30	0	400
RT Vol	0	10	150	10	0	30
Lane Flow Rate	76	239	283	54	22	467
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.145	0.419	0.466	0.105	0.04	0.784
Departure Headway (Hd)	6.844	6.302	5.938	6.929	6.596	6.038
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	520	567	602	520	540	598
Service Time	4.629	4.087	4.028	4.929	4.368	3.81
HCM Lane V/C Ratio	0.146	0.422	0.47	0.104	0.041	0.781
HCM Control Delay	10.8	13.6	14.2	10.7	9.6	27.4
HCM Lane LOS	B	B	B	B	A	D
HCM 95th-tile Q	0.5	2.1	2.5	0.3	0.1	7.4

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	40	30	0	30	20	20	50	10	0	0	0
Future Vol, veh/h	20	40	30	0	30	20	20	50	10	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	43	33	0	33	22	22	54	11	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	7.2	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	25%	22%	0%
Vol Thru, %	62%	44%	60%
Vol Right, %	12%	33%	40%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	80	90	50
LT Vol	20	20	0
Through Vol	50	40	30
RT Vol	10	30	20
Lane Flow Rate	87	98	54
Geometry Grp	1	1	1
Degree of Util (X)	0.101	0.108	0.059
Departure Headway (Hd)	4.17	3.972	3.921
Convergence, Y/N	Yes	Yes	Yes
Cap	852	895	904
Service Time	2.231	2.029	1.987
HCM Lane V/C Ratio	0.102	0.109	0.06
HCM Control Delay	7.7	7.5	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	20	10	0	20	40	10	200	10	20	340	30
Future Vol, veh/h	20	20	10	0	20	40	10	200	10	20	340	30
Conflicting Peds, #/hr	5	0	3	3	0	5	3	0	19	19	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	22	11	0	22	43	11	217	11	22	370	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	714	701	392	713	713	247	405	0	0	247	0	0
Stage 1	432	432	-	264	264	-	-	-	-	-	-	-
Stage 2	282	269	-	449	449	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	346	363	657	347	357	792	1154	-	-	1319	-	-
Stage 1	602	582	-	741	690	-	-	-	-	-	-	-
Stage 2	725	687	-	589	572	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	300	343	653	309	337	771	1150	-	-	1312	-	-
Mov Cap-2 Maneuver	300	343	-	309	337	-	-	-	-	-	-	-
Stage 1	593	567	-	717	668	-	-	-	-	-	-	-
Stage 2	651	665	-	543	558	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.9	12.6	0.4	0.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1150	-	-	356	539	1312	-	-
HCM Lane V/C Ratio	0.009	-	-	0.153	0.121	0.017	-	-
HCM Control Delay (s)	8.2	0	-	16.9	12.6	7.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.4	0.1	-	-

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	210	20	20	130	50	10	70	20	100	130	30
Future Vol, veh/h	40	210	20	20	130	50	10	70	20	100	130	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	228	22	22	141	54	11	76	22	109	141	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.6	11.1	10	12.8
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	15%	10%	38%
Vol Thru, %	70%	78%	65%	50%
Vol Right, %	20%	7%	25%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	270	200	260
LT Vol	10	40	20	100
Through Vol	70	210	130	130
RT Vol	20	20	50	30
Lane Flow Rate	109	293	217	283
Geometry Grp	1	1	1	1
Degree of Util (X)	0.173	0.44	0.326	0.434
Departure Headway (Hd)	5.743	5.394	5.406	5.525
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	622	666	663	650
Service Time	3.801	3.439	3.455	3.57
HCM Lane V/C Ratio	0.175	0.44	0.327	0.435
HCM Control Delay	10	12.6	11.1	12.8
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	2.2	1.4	2.2

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	280	10	30	170	70	10	90	10	120	190	20
Future Vol, veh/h	30	280	10	30	170	70	10	90	10	120	190	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	304	11	33	185	76	11	98	11	130	207	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	17.6	15.1	11.8	18.9
HCM LOS	C	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	9%	11%	36%
Vol Thru, %	82%	88%	63%	58%
Vol Right, %	9%	3%	26%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	320	270	330
LT Vol	10	30	30	120
Through Vol	90	280	170	190
RT Vol	10	10	70	20
Lane Flow Rate	120	348	293	359
Geometry Grp	1	1	1	1
Degree of Util (X)	0.224	0.59	0.497	0.619
Departure Headway (Hd)	6.746	6.107	6.093	6.21
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	531	591	590	581
Service Time	4.809	4.154	4.142	4.256
HCM Lane V/C Ratio	0.226	0.589	0.497	0.618
HCM Control Delay	11.8	17.6	15.1	18.9
HCM Lane LOS	B	C	C	C
HCM 95th-tile Q	0.9	3.8	2.8	4.2

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

02/22/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	40	20	80	20	240	20	630	570	370	550	60
Future Volume (veh/h)	30	40	20	80	20	240	20	630	570	370	550	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	43	22	87	0	276	22	685	620	402	598	65
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	139	71	188	0	349	75	652	575	412	1797	195
Arrive On Green	0.17	0.17	0.17	0.11	0.00	0.11	0.04	0.37	0.37	0.23	0.56	0.56
Sat Flow, veh/h	617	805	412	1774	0	3293	1774	1770	1560	1774	3216	349
Grp Volume(v), veh/h	98	0	0	87	0	276	22	685	620	402	328	335
Grp Sat Flow(s),veh/h/ln	1834	0	0	1774	0	1647	1774	1770	1560	1774	1770	1796
Q Serve(g_s), s	7.0	0.0	0.0	6.9	0.0	12.3	1.8	55.3	55.3	33.8	15.1	15.2
Cycle Q Clear(g_c), s	7.0	0.0	0.0	6.9	0.0	12.3	1.8	55.3	55.3	33.8	15.1	15.2
Prop In Lane	0.34		0.22	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	318	0	0	188	0	349	75	652	575	412	989	1003
V/C Ratio(X)	0.31	0.00	0.00	0.46	0.00	0.79	0.30	1.05	1.08	0.98	0.33	0.33
Avail Cap(c_a), veh/h	318	0	0	188	0	349	75	652	575	412	989	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.35	0.35	0.35	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	63.0	0.0	65.4	69.7	47.3	47.4	57.2	17.9	18.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	8.0	0.0	16.6	0.3	35.5	46.7	38.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	3.8	0.0	6.4	0.9	33.4	31.3	20.9	7.6	7.8
LnGrp Delay(d),s/veh	56.7	0.0	0.0	71.0	0.0	82.0	70.0	82.8	94.1	95.2	18.8	18.8
LnGrp LOS	E			E		F	E	F	F	F	B	B
Approach Vol, veh/h		98			363			1327			1065	
Approach Delay, s/veh		56.7			79.4			87.9			47.7	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.0	59.9		30.6	10.5	88.4		20.5
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	34.8	* 55		26.0	6.3	* 84		15.9
Max Q Clear Time (g_c+I1), s	35.8	57.3		9.0	3.8	17.2		14.3
Green Ext Time (p_c), s	0.0	0.0		0.2	0.3	1.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	70.7
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	480	140	60	430	270	260	720	60	220	350	110
Future Volume (veh/h)	380	480	140	60	430	270	260	720	60	220	350	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	413	522	152	65	467	293	283	783	65	239	380	120
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	379	1218	538	85	920	409	266	939	78	305	591	184
Arrive On Green	0.11	0.34	0.34	0.05	0.26	0.26	0.15	0.28	0.28	0.09	0.22	0.22
Sat Flow, veh/h	3442	3539	1564	1845	3539	1572	1774	3306	274	3442	2654	827
Grp Volume(v), veh/h	413	522	152	65	467	293	283	419	429	239	252	248
Grp Sat Flow(s),veh/h/ln	1721	1770	1564	1845	1770	1572	1774	1770	1811	1721	1770	1711
Q Serve(g_s), s	11.0	11.3	7.1	3.5	11.2	11.8	15.0	22.2	22.2	6.8	12.9	13.2
Cycle Q Clear(g_c), s	11.0	11.3	7.1	3.5	11.2	11.8	15.0	22.2	22.2	6.8	12.9	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.48
Lane Grp Cap(c), veh/h	379	1218	538	85	920	409	266	503	514	305	394	381
V/C Ratio(X)	1.09	0.43	0.28	0.77	0.51	0.72	1.06	0.83	0.83	0.78	0.64	0.65
Avail Cap(c_a), veh/h	379	1218	538	148	920	409	266	584	597	344	495	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.97	0.97	0.97	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	44.5	25.2	23.8	47.2	31.5	16.2	42.5	33.6	33.6	44.6	35.2	35.3
Incr Delay (d2), s/veh	72.8	1.1	1.3	5.2	1.9	10.0	72.9	8.9	8.8	8.2	1.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	5.7	3.2	1.9	5.8	6.2	12.7	12.1	12.3	3.6	6.5	6.4
LnGrp Delay(d),s/veh	117.3	26.3	25.1	52.3	33.5	26.2	115.4	42.5	42.4	52.8	36.9	37.3
LnGrp LOS	F	C	C	D	C	C	F	D	D	D	D	D
Approach Vol, veh/h		1087			825			1131			739	
Approach Delay, s/veh		60.7			32.4			60.7			42.2	
Approach LOS		E			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	40.4	19.0	28.3	17.0	32.0	12.9	34.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	8.0	29.0	15.0	28.0	11.0	* 26	10.0	33.0
Max Q Clear Time (g_c+I1), s	5.5	13.3	17.0	15.2	13.0	13.8	8.8	24.2
Green Ext Time (p_c), s	0.0	3.9	0.0	4.7	0.0	2.9	0.1	3.8

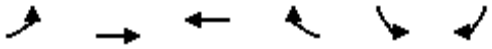
Intersection Summary	
HCM 2010 Ctrl Delay	50.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	80	60	110	130	130	90	860	90	40	490	40
Future Volume (veh/h)	60	80	60	110	130	130	90	860	90	40	490	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	65	87	65	120	141	141	98	935	98	43	533	43
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	204	131	181	189	171	126	986	833	54	910	761
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.07	0.53	0.53	0.03	0.49	0.49
Sat Flow, veh/h	337	678	434	422	626	566	1774	1863	1574	1774	1863	1557
Grp Volume(v), veh/h	217	0	0	402	0	0	98	935	98	43	533	43
Grp Sat Flow(s),veh/h/ln	1450	0	0	1615	0	0	1774	1863	1574	1774	1863	1557
Q Serve(g_s), s	0.0	0.0	0.0	10.0	0.0	0.0	4.7	40.9	2.7	2.1	17.7	1.3
Cycle Q Clear(g_c), s	9.8	0.0	0.0	19.8	0.0	0.0	4.7	40.9	2.7	2.1	17.7	1.3
Prop In Lane	0.30		0.30	0.30		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	0	0	541	0	0	126	986	833	54	910	761
V/C Ratio(X)	0.44	0.00	0.00	0.74	0.00	0.00	0.78	0.95	0.12	0.80	0.59	0.06
Avail Cap(c_a), veh/h	491	0	0	541	0	0	226	1037	876	82	910	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	0.0	27.8	0.0	0.0	39.4	19.2	10.2	41.6	15.8	11.6
Incr Delay (d2), s/veh	2.9	0.0	0.0	8.9	0.0	0.0	9.8	16.6	0.1	25.8	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	10.2	0.0	0.0	2.6	25.3	1.2	1.4	9.3	0.5
LnGrp Delay(d),s/veh	27.0	0.0	0.0	36.7	0.0	0.0	49.2	35.8	10.3	67.3	16.8	11.6
LnGrp LOS	C			D			D	D	B	E	B	B
Approach Vol, veh/h		217			402			1131			619	
Approach Delay, s/veh		27.0			36.7			34.8			19.9	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	49.6		30.0	10.1	46.1		30.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	48.0		26.0	11.0	41.0		26.0
Max Q Clear Time (g_c+I1), s	4.1	42.9		11.8	6.7	19.7		21.8
Green Ext Time (p_c), s	0.0	2.7		2.5	0.1	8.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	540	630	10	80	120
Future Volume (veh/h)	100	540	630	10	80	120
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	109	587	685	11	87	130
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	142	2846	2432	39	190	173
Arrive On Green	0.08	0.80	1.00	1.00	0.11	0.11
Sat Flow, veh/h	1845	3632	3656	57	1774	1615
Grp Volume(v), veh/h	109	587	340	356	87	130
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1851	1774	1615
Q Serve(g_s), s	5.2	3.5	0.0	0.0	4.1	7.0
Cycle Q Clear(g_c), s	5.2	3.5	0.0	0.0	4.1	7.0
Prop In Lane	1.00			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	142	2846	1208	1263	190	173
V/C Ratio(X)	0.77	0.21	0.28	0.28	0.46	0.75
Avail Cap(c_a), veh/h	349	2846	1208	1263	414	377
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	40.7	2.1	0.0	0.0	37.7	39.0
Incr Delay (d2), s/veh	7.0	0.1	0.6	0.5	1.7	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.8	0.2	0.2	2.1	6.4
LnGrp Delay(d),s/veh	47.7	2.2	0.6	0.5	39.4	45.5
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		696	696		217	
Approach Delay, s/veh		9.3	0.6		43.0	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		76.4		13.6	10.9	65.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		61.0		21.0	17.0	40.0		
Max Q Clear Time (g_c+I1), s		5.5		9.0	7.2	2.0		
Green Ext Time (p_c), s		6.6		0.6	0.2	6.4		

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	450	60	40	470	20	90	30	30	50	30	120
Future Volume (veh/h)	100	450	60	40	470	20	90	30	30	50	30	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.97	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	109	489	65	43	511	22	98	33	33	54	33	130
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	2050	271	55	2094	90	177	60	44	212	115	284
Arrive On Green	0.15	1.00	1.00	0.03	0.61	0.61	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1845	3140	416	1845	3452	148	616	328	238	801	627	1545
Grp Volume(v), veh/h	109	275	279	43	262	271	164	0	0	87	0	130
Grp Sat Flow(s),veh/h/ln	1845	1770	1786	1845	1770	1831	1182	0	0	1428	0	1545
Q Serve(g_s), s	5.1	0.0	0.0	2.1	6.1	6.2	8.2	0.0	0.0	0.0	0.0	6.7
Cycle Q Clear(g_c), s	5.1	0.0	0.0	2.1	6.1	6.2	12.7	0.0	0.0	4.5	0.0	6.7
Prop In Lane	1.00		0.23	1.00		0.08	0.60		0.20	0.62		1.00
Lane Grp Cap(c), veh/h	140	1155	1166	55	1074	1111	281	0	0	327	0	284
V/C Ratio(X)	0.78	0.24	0.24	0.78	0.24	0.24	0.58	0.00	0.00	0.27	0.00	0.46
Avail Cap(c_a), veh/h	349	1155	1166	205	1074	1111	462	0	0	517	0	481
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.91	0.91	0.91	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	0.0	43.3	8.2	8.2	36.0	0.0	0.0	31.7	0.0	32.7
Incr Delay (d2), s/veh	8.6	0.5	0.5	18.6	0.5	0.5	1.9	0.0	0.0	0.4	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.2	0.2	1.3	3.1	3.2	4.1	0.0	0.0	1.9	0.0	3.0
LnGrp Delay(d),s/veh	46.0	0.5	0.5	61.9	8.7	8.6	37.9	0.0	0.0	32.1	0.0	33.9
LnGrp LOS	D	A	A	E	A	A	D			C		C
Approach Vol, veh/h		663			576			164			217	
Approach Delay, s/veh		8.0			12.6			37.9			33.2	
Approach LOS		A			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	62.7		20.6	10.8	58.6		20.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	40.0		28.0	17.0	33.0		28.0
Max Q Clear Time (g_c+I1), s	4.1	2.0		8.7	7.1	8.2		14.7
Green Ext Time (p_c), s	0.0	4.8		2.1	0.2	4.6		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	350	30	10	340	100	60	260	30	130	120	110
Future Volume (veh/h)	80	350	30	10	340	100	60	260	30	130	120	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	87	380	33	11	370	109	65	283	33	141	130	120
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	1359	117	20	968	280	83	389	320	183	251	231
Arrive On Green	0.06	0.41	0.41	0.01	0.36	0.36	0.05	0.21	0.21	0.10	0.27	0.27
Sat Flow, veh/h	1845	3286	284	1845	2670	773	1774	1863	1536	1774	922	851
Grp Volume(v), veh/h	87	204	209	11	243	236	65	283	33	141	0	250
Grp Sat Flow(s),veh/h/ln	1845	1770	1800	1845	1770	1673	1774	1863	1536	1774	0	1773
Q Serve(g_s), s	3.3	5.3	5.4	0.4	7.1	7.3	2.5	9.9	1.2	5.4	0.0	8.4
Cycle Q Clear(g_c), s	3.3	5.3	5.4	0.4	7.1	7.3	2.5	9.9	1.2	5.4	0.0	8.4
Prop In Lane	1.00		0.16	1.00		0.46	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	114	732	744	20	642	606	83	389	320	183	0	482
V/C Ratio(X)	0.76	0.28	0.28	0.54	0.38	0.39	0.78	0.73	0.10	0.77	0.00	0.52
Avail Cap(c_a), veh/h	237	732	744	105	642	606	202	584	482	417	0	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	13.6	13.6	34.5	16.5	16.6	33.1	25.9	22.4	30.6	0.0	21.6
Incr Delay (d2), s/veh	9.9	0.9	0.9	20.6	1.7	1.9	14.6	2.6	0.1	6.7	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.8	2.9	0.3	3.7	3.7	1.6	5.4	0.5	3.0	0.0	4.2
LnGrp Delay(d),s/veh	42.3	14.6	14.6	55.1	18.2	18.5	47.7	28.5	22.6	37.4	0.0	22.5
LnGrp LOS	D	B	B	E	B	B	D	C	C	D		C
Approach Vol, veh/h		500			490			381			391	
Approach Delay, s/veh		19.4			19.2			31.3			27.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	35.0	7.3	23.1	8.3	31.4	11.7	18.6
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	4.0	29.0	8.0	31.0	9.0	24.0	16.5	22.0
Max Q Clear Time (g_c+I1), s	2.4	7.4	4.5	10.4	5.3	9.3	7.4	11.9
Green Ext Time (p_c), s	0.0	3.6	0.0	3.5	0.1	3.2	0.3	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	270	30	40	300	80	10	30	30	140	110	200
Future Volume (veh/h)	360	270	30	40	300	80	10	30	30	140	110	200
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1863	1863	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	391	293	33	43	326	87	11	33	33	152	120	217
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	1492	166	54	708	185	19	181	181	188	184	334
Arrive On Green	0.24	0.47	0.47	0.03	0.26	0.26	0.01	0.20	0.20	0.11	0.30	0.30
Sat Flow, veh/h	1845	3192	356	1774	2729	712	1774	884	884	1774	616	1113
Grp Volume(v), veh/h	391	161	165	43	209	204	11	0	66	152	0	337
Grp Sat Flow(s),veh/h/ln	1845	1770	1778	1774	1770	1672	1774	0	1767	1774	0	1729
Q Serve(g_s), s	17.1	4.4	4.5	2.0	8.3	8.6	0.5	0.0	2.6	7.0	0.0	14.1
Cycle Q Clear(g_c), s	17.1	4.4	4.5	2.0	8.3	8.6	0.5	0.0	2.6	7.0	0.0	14.1
Prop In Lane	1.00		0.20	1.00		0.43	1.00		0.50	1.00		0.64
Lane Grp Cap(c), veh/h	440	827	831	54	459	434	19	0	361	188	0	518
V/C Ratio(X)	0.89	0.19	0.20	0.80	0.45	0.47	0.57	0.00	0.18	0.81	0.00	0.65
Avail Cap(c_a), veh/h	597	827	831	128	459	434	85	0	361	276	0	518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.7	13.0	13.0	40.2	25.9	26.1	41.1	0.0	27.4	36.5	0.0	25.4
Incr Delay (d2), s/veh	12.1	0.5	0.5	22.8	3.2	3.6	24.4	0.0	1.1	10.5	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	2.3	2.3	1.3	4.4	4.4	0.4	0.0	1.4	4.0	0.0	7.6
LnGrp Delay(d),s/veh	42.8	13.5	13.6	63.0	29.2	29.7	65.4	0.0	28.6	47.0	0.0	31.6
LnGrp LOS	D	B	B	E	C	C	E		C	D		C
Approach Vol, veh/h		717			456			77			489	
Approach Delay, s/veh		29.5			32.6			33.8			36.4	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.9	25.6	4.9	29.0	6.5	43.0	12.9	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	18.0	4.0	25.0	6.0	39.0	13.0	16.0
Max Q Clear Time (g_c+I1), s	19.1	10.6	2.5	16.1	4.0	6.5	9.0	4.6
Green Ext Time (p_c), s	0.8	2.6	0.0	1.8	0.0	4.9	0.1	2.0

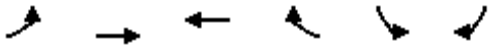
Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	350	70	60	430	100	160	820	140	130	480	20
Future Volume (veh/h)	30	350	70	60	430	100	160	820	140	130	480	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	380	76	65	467	109	174	891	152	141	522	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	958	189	84	921	213	170	976	167	151	1086	46
Arrive On Green	0.03	0.33	0.33	0.05	0.33	0.33	0.10	0.32	0.32	0.08	0.31	0.31
Sat Flow, veh/h	1774	2897	571	1774	2798	646	1774	3008	513	1774	3458	146
Grp Volume(v), veh/h	33	230	226	65	294	282	174	524	519	141	267	277
Grp Sat Flow(s),veh/h/ln	1774	1770	1698	1774	1770	1674	1774	1770	1751	1774	1770	1834
Q Serve(g_s), s	1.7	9.4	9.7	3.4	12.6	12.8	9.0	26.8	26.8	7.4	11.5	11.5
Cycle Q Clear(g_c), s	1.7	9.4	9.7	3.4	12.6	12.8	9.0	26.8	26.8	7.4	11.5	11.5
Prop In Lane	1.00		0.34	1.00		0.39	1.00		0.29	1.00		0.08
Lane Grp Cap(c), veh/h	49	585	562	84	582	551	170	574	568	151	556	576
V/C Ratio(X)	0.67	0.39	0.40	0.77	0.50	0.51	1.03	0.91	0.91	0.94	0.48	0.48
Avail Cap(c_a), veh/h	94	585	562	170	582	551	170	582	576	151	564	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	24.2	24.3	44.4	25.4	25.5	42.6	30.5	30.5	42.8	26.1	26.1
Incr Delay (d2), s/veh	14.7	2.0	2.1	14.0	3.1	3.4	76.2	18.7	18.9	54.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.9	4.9	2.0	6.6	6.4	8.0	16.1	16.0	5.9	5.7	6.0
LnGrp Delay(d),s/veh	60.0	26.2	26.5	58.3	28.5	28.9	119.1	49.2	49.4	97.2	26.7	26.7
LnGrp LOS	E	C	C	E	C	C	F	D	D	F	C	C
Approach Vol, veh/h		489			641			1217			685	
Approach Delay, s/veh		28.6			31.7			59.3			41.2	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	37.2	13.0	35.6	8.6	37.0	12.0	36.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	9.0	27.0	9.0	30.0	5.0	* 31	8.0	31.0
Max Q Clear Time (g_c+I1), s	5.4	11.7	11.0	13.5	3.7	14.8	9.4	28.8
Green Ext Time (p_c), s	0.0	1.8	0.0	6.6	0.0	2.1	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

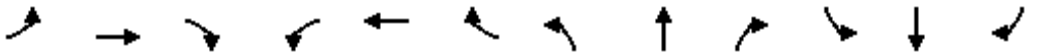
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	630	680	630	240	70
Future Volume (veh/h)	70	630	680	630	240	70
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	76	685	739	685	261	76
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	98	2433	2021	1200	338	313
Arrive On Green	0.06	0.69	0.57	0.57	0.19	0.19
Sat Flow, veh/h	1774	3632	3632	1574	1774	1647
Grp Volume(v), veh/h	76	685	739	685	261	76
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1574	1774	1647
Q Serve(g_s), s	2.8	4.9	7.4	12.0	9.1	2.6
Cycle Q Clear(g_c), s	2.8	4.9	7.4	12.0	9.1	2.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	98	2433	2021	1200	338	313
V/C Ratio(X)	0.78	0.28	0.37	0.57	0.77	0.24
Avail Cap(c_a), veh/h	244	2433	2021	1200	1003	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	4.0	7.6	3.3	25.2	22.5
Incr Delay (d2), s/veh	12.2	0.3	0.5	2.0	3.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.5	3.7	9.8	4.8	2.5
LnGrp Delay(d),s/veh	42.8	4.3	8.1	5.3	28.9	22.9
LnGrp LOS	D	A	A	A	C	C
Approach Vol, veh/h		761	1424		337	
Approach Delay, s/veh		8.1	6.8		27.6	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		49.0		16.5	7.6	41.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		45.0		37.0	9.0	32.0		
Max Q Clear Time (g_c+I1), s		6.9		11.1	4.8	14.0		
Green Ext Time (p_c), s		14.5		1.3	0.1	10.2		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	400	300	230	500	0	620	0	230	0	0	0
Future Volume (vph)	0	400	300	230	500	0	620	0	230	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95	1.00	1.00	0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00	0.98			
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Frt		1.00	0.85	1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3539	1404	1770	3539		1625	1681	1446			
Flt Permitted		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3539	1404	1770	3539		1625	1681	1446			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	435	326	250	543	0	674	0	250	0	0	0
RTOR Reduction (vph)	0	0	129	0	0	0	0	0	173	0	0	0
Lane Group Flow (vph)	0	435	197	250	543	0	337	337	77	0	0	0
Confl. Peds. (#/hr)	5		15			5			8			
Confl. Bikes (#/hr)						1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)		19.9	40.3	14.3	38.2		20.4	20.4	20.4			
Effective Green, g (s)		19.9	40.3	14.3	38.2		20.4	20.4	20.4			
Actuated g/C Ratio		0.30	0.61	0.21	0.57		0.31	0.31	0.31			
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		1057	933	380	2029		497	514	442			
v/s Ratio Prot		c0.12	0.06	c0.14	0.15		c0.21	0.20				
v/s Ratio Perm			0.08						0.05			
v/c Ratio		0.41	0.21	0.66	0.27		0.68	0.66	0.17			
Uniform Delay, d1		18.7	6.0	23.9	7.2		20.2	20.1	16.9			
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		1.2	0.1	4.1	0.3		3.7	3.0	0.2			
Delay (s)		19.9	6.1	28.0	7.5		23.9	23.1	17.1			
Level of Service		B	A	C	A		C	C	B			
Approach Delay (s)		13.9			13.9			21.8			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	66.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.3%	ICU Level of Service	A
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	480	10	20	540	80	50	10	180	60	0	0
Future Volume (veh/h)	50	480	10	20	540	80	50	10	180	60	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	54	522	11	22	587	87	54	11	196	65	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	1941	41	36	1459	216	347	62	307	299	0	310
Arrive On Green	0.09	0.55	0.55	0.02	0.47	0.47	0.20	0.20	0.20	0.20	0.00	0.00
Sat Flow, veh/h	1774	3544	75	1774	3082	455	1276	317	1569	983	0	1583
Grp Volume(v), veh/h	54	260	273	22	336	338	65	0	196	65	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1849	1774	1770	1768	1593	0	1569	983	0	1583
Q Serve(g_s), s	1.9	5.3	5.3	0.8	8.4	8.4	0.0	0.0	7.8	3.3	0.0	0.0
Cycle Q Clear(g_c), s	1.9	5.3	5.3	0.8	8.4	8.4	2.0	0.0	7.8	5.4	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.26	0.83		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	969	1012	36	838	837	409	0	307	299	0	310
V/C Ratio(X)	0.32	0.27	0.27	0.62	0.40	0.40	0.16	0.00	0.64	0.22	0.00	0.00
Avail Cap(c_a), veh/h	262	969	1012	131	838	837	816	0	743	622	0	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.6	8.1	8.1	32.9	11.6	11.6	22.7	0.0	25.0	24.9	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.7	0.7	16.3	1.4	1.4	0.2	0.0	2.2	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.7	2.8	0.6	4.4	4.4	1.0	0.0	3.5	1.1	0.0	0.0
LnGrp Delay(d),s/veh	29.7	8.8	8.8	49.1	13.0	13.0	22.9	0.0	27.2	25.3	0.0	0.0
LnGrp LOS	C	A	A	D	B	B	C		C	C		
Approach Vol, veh/h		587			696			261			65	
Approach Delay, s/veh		10.7			14.2			26.1			25.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	43.0		19.2	10.4	38.0		19.2
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	37.0		32.0	10.0	32.0		32.0
Max Q Clear Time (g_c+I1), s	2.8	7.3		7.4	3.9	10.4		9.8
Green Ext Time (p_c), s	0.0	5.2		1.5	0.0	4.9		1.4

Intersection Summary		
HCM 2010 Ctrl Delay		15.3
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	40	470	160	80	10	550	30	10	180	40
Future Volume (veh/h)	80	10	40	470	160	80	10	550	30	10	180	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	87	11	43	511	174	87	11	598	33	11	196	43
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	512	60	801	581	594	297	46	644	35	53	537	114
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	859	119	1580	1344	1172	586	12	1799	98	30	1499	318
Grp Volume(v), veh/h	98	0	43	511	0	261	642	0	0	250	0	0
Grp Sat Flow(s),veh/h/ln	978	0	1580	1344	0	1758	1909	0	0	1847	0	0
Q Serve(g_s), s	4.3	0.0	1.2	33.1	0.0	7.6	9.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.9	0.0	1.2	45.0	0.0	7.6	28.8	0.0	0.0	8.8	0.0	0.0
Prop In Lane	0.89		1.00	1.00		0.33	0.02		0.05	0.04		0.17
Lane Grp Cap(c), veh/h	572	0	801	581	0	891	725	0	0	704	0	0
V/C Ratio(X)	0.17	0.00	0.05	0.88	0.00	0.29	0.89	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	572	0	801	581	0	891	750	0	0	727	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	0.0	11.1	28.2	0.0	12.7	27.5	0.0	0.0	21.1	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	17.1	0.0	0.8	12.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.6	15.1	0.0	3.9	17.6	0.0	0.0	4.6	0.0	0.0
LnGrp Delay(d),s/veh	16.3	0.0	11.2	45.3	0.0	13.5	39.5	0.0	0.0	21.4	0.0	0.0
LnGrp LOS	B		B	D		B	D			C		
Approach Vol, veh/h		141			772			642			250	
Approach Delay, s/veh		14.7			34.6			39.5			21.4	
Approach LOS		B			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		37.8		51.0		37.8
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		33.0		45.0		33.0
Max Q Clear Time (g_c+I1), s		13.9		10.8		47.0		30.8
Green Ext Time (p_c), s		4.8		4.2		0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	30	40	600	790	0	110	0	380	0	10	0
Future Volume (veh/h)	0	30	40	600	790	0	110	0	380	0	10	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1976	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	33	43	652	859	0	120	0	413	0	11	0
Adj No. of Lanes	1	1	0	1	1	0	0	1	2	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	117	152	639	1043	0	284	0	443	0	298	0
Arrive On Green	0.00	0.16	0.16	0.36	0.56	0.00	0.16	0.00	0.16	0.00	0.16	0.00
Sat Flow, veh/h	1774	730	951	1774	1863	0	1774	0	2769	0	1863	0
Grp Volume(v), veh/h	0	0	76	652	859	0	120	0	413	0	11	0
Grp Sat Flow(s),veh/h/ln	1774	0	1681	1774	1863	0	1774	0	1385	0	1863	0
Q Serve(g_s), s	0.0	0.0	4.0	36.0	37.7	0.0	6.1	0.0	14.7	0.0	0.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	4.0	36.0	37.7	0.0	6.1	0.0	14.7	0.0	0.5	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	0	269	639	1043	0	284	0	443	0	298	0
V/C Ratio(X)	0.00	0.00	0.28	1.02	0.82	0.00	0.42	0.00	0.93	0.00	0.04	0.00
Avail Cap(c_a), veh/h	71	0	269	639	1043	0	284	0	443	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.99	1.00	1.00	0.00	0.63	0.00	0.63	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	37.0	32.0	18.0	0.0	37.8	0.0	41.5	0.0	35.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.6	41.0	7.4	0.0	2.9	0.0	20.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.0	24.8	21.2	0.0	3.2	0.0	6.9	0.0	0.3	0.0
LnGrp Delay(d),s/veh	0.0	0.0	39.5	73.0	25.3	0.0	40.7	0.0	62.3	0.0	35.7	0.0
LnGrp LOS			D	F	C		D		E		D	
Approach Vol, veh/h		76			1511			533			11	
Approach Delay, s/veh		39.5			45.9			57.4			35.7	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	40.0	20.0		20.0	0.0	60.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	36.0	16.0		16.0	4.0	48.0		16.0
Max Q Clear Time (g_c+I1), s	38.0	6.0		2.5	0.0	39.7		16.7
Green Ext Time (p_c), s	0.0	4.8		0.0	0.0	4.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	35.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	70	10	40	200	70	380	250	20	40	160	40
Future Vol, veh/h	120	70	10	40	200	70	380	250	20	40	160	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	130	76	11	43	217	76	413	272	22	43	174	43
Number of Lanes	0	1	0	0	1	0	1	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	1	1
HCM Control Delay	22.1	34.6	44.6	22.4
HCM LOS	C	D	E	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	60%	13%	20%	0%
Vol Thru, %	0%	100%	0%	35%	65%	80%	0%
Vol Right, %	0%	0%	100%	5%	23%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	380	250	20	200	310	200	40
LT Vol	380	0	0	120	40	40	0
Through Vol	0	250	0	70	200	160	0
RT Vol	0	0	20	10	70	0	40
Lane Flow Rate	413	272	22	217	337	217	43
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.955	0.589	0.043	0.544	0.778	0.574	0.105
Departure Headway (Hd)	8.325	7.807	7.083	9.013	8.308	9.499	8.658
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	438	462	505	400	438	380	413
Service Time	6.078	5.561	4.836	6.767	6.008	7.264	6.423
HCM Lane V/C Ratio	0.943	0.589	0.044	0.542	0.769	0.571	0.104
HCM Control Delay	61.8	21.2	10.2	22.1	34.6	24.4	12.4
HCM Lane LOS	F	C	B	C	D	C	B
HCM 95th-tile Q	11.3	3.7	0.1	3.1	6.7	3.4	0.3

Intersection	
Intersection Delay, s/veh	187.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	540	0	0	0	0	890	700	250	760	0
Future Vol, veh/h	30	0	540	0	0	0	0	890	700	250	760	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	587	0	0	0	0	967	761	272	826	0
Number of Lanes	1	0	2	0	0	0	0	2	1	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	12.9	167.6	316.2
HCM LOS	B	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	0%	50%	0%
Vol Thru, %	100%	100%	0%	0%	0%	0%	50%	100%
Vol Right, %	0%	0%	100%	0%	100%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	445	445	700	30	270	270	503	507
LT Vol	0	0	0	30	0	0	250	0
Through Vol	445	445	0	0	0	0	253	507
RT Vol	0	0	700	0	270	270	0	0
Lane Flow Rate	484	484	761	33	293	293	547	551
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	1.198	1.198	1.37	0.086	0.677	0.536	1.62	1.593
Departure Headway (Hd)	9.74	9.74	7.251	6.03	4.809	3.044	12.079	11.824
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	377	377	510	597	754	1186	306	314
Service Time	7.44	7.44	4.951	3.73	2.509	0.744	9.779	9.524
HCM Lane V/C Ratio	1.284	1.284	1.492	0.055	0.389	0.247	1.788	1.755
HCM Control Delay	142.1	142.1	200	9.3	17	9.2	322.4	310.1
HCM Lane LOS	F	F	F	A	C	A	F	F
HCM 95th-tile Q	18.2	18.2	31.2	0.3	5.3	3.3	29.3	28.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	40	580	10	70	0	870	80	10	0	20	500
Future Volume (veh/h)	110	40	580	10	70	0	870	80	10	0	20	500
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	120	43	630	11	76	0	946	87	11	0	22	543
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	358	128	754	15	101	0	1022	920	116	0	391	332
Arrive On Green	0.27	0.27	0.27	0.06	0.06	0.00	0.30	0.55	0.55	0.00	0.21	0.21
Sat Flow, veh/h	1323	474	2787	234	1617	0	3442	1682	213	0	1863	1583
Grp Volume(v), veh/h	163	0	630	87	0	0	946	0	98	0	22	543
Grp Sat Flow(s),veh/h/ln	1797	0	1393	1851	0	0	1721	0	1894	0	1863	1583
Q Serve(g_s), s	7.3	0.0	21.3	4.6	0.0	0.0	26.7	0.0	2.5	0.0	0.9	21.0
Cycle Q Clear(g_c), s	7.3	0.0	21.3	4.6	0.0	0.0	26.7	0.0	2.5	0.0	0.9	21.0
Prop In Lane	0.74		1.00	0.13		0.00	1.00		0.11	0.00		1.00
Lane Grp Cap(c), veh/h	486	0	754	115	0	0	1022	0	1036	0	391	332
V/C Ratio(X)	0.34	0.00	0.84	0.75	0.00	0.00	0.93	0.00	0.09	0.00	0.06	1.63
Avail Cap(c_a), veh/h	486	0	754	296	0	0	1067	0	1061	0	391	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.31	0.00	0.31	0.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	0.0	34.4	46.1	0.0	0.0	34.1	0.0	10.8	0.0	31.6	39.5
Incr Delay (d2), s/veh	1.9	0.0	10.6	9.5	0.0	0.0	4.8	0.0	0.0	0.0	0.1	298.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	9.3	2.7	0.0	0.0	13.3	0.0	1.3	0.0	0.5	36.7
LnGrp Delay(d),s/veh	31.1	0.0	44.9	55.6	0.0	0.0	38.9	0.0	10.8	0.0	31.6	337.7
LnGrp LOS	C		D	E			D		B		C	F
Approach Vol, veh/h		793			87			1044			565	
Approach Delay, s/veh		42.1			55.6			36.3			325.8	
Approach LOS		D			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		31.1	33.7	25.0		10.2		58.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0	31.0	21.0		16.0		56.0
Max Q Clear Time (g_c+I1), s		23.3	28.7	23.0		6.6		4.5
Green Ext Time (p_c), s		0.0	1.0	0.0		0.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	104.5
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	150	1050	40	60	500
Future Vol, veh/h	20	150	1050	40	60	500
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	163	1141	43	65	543

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1601	628	0	0	1221	0
Stage 1	1199	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	97	426	-	-	567	-
Stage 1	248	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	78	409	-	-	567	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	238	-	-	-	-	-
Stage 2	538	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41.9	0	2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	273	567	-
HCM Lane V/C Ratio	-	-	0.677	0.115	-
HCM Control Delay (s)	-	-	41.9	12.2	0.8
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	4.5	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	130	150	40	190	40	260	990	10	10	370	50
Future Volume (veh/h)	120	130	150	40	190	40	260	990	10	10	370	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	130	141	163	43	207	43	283	1076	11	11	402	54
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	185	192	102	437	84	328	1662	17	19	904	121
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.18	0.46	0.46	0.01	0.29	0.29
Sat Flow, veh/h	404	559	579	156	1319	254	1774	3588	37	1774	3128	417
Grp Volume(v), veh/h	434	0	0	293	0	0	283	531	556	11	226	230
Grp Sat Flow(s),veh/h/ln	1543	0	0	1729	0	0	1774	1770	1855	1774	1770	1776
Q Serve(g_s), s	11.0	0.0	0.0	0.0	0.0	0.0	12.7	18.9	18.9	0.5	8.5	8.7
Cycle Q Clear(g_c), s	21.3	0.0	0.0	10.3	0.0	0.0	12.7	18.9	18.9	0.5	8.5	8.7
Prop In Lane	0.30		0.38	0.15		0.15	1.00		0.02	1.00		0.23
Lane Grp Cap(c), veh/h	567	0	0	623	0	0	328	820	859	19	512	513
V/C Ratio(X)	0.76	0.00	0.00	0.47	0.00	0.00	0.86	0.65	0.65	0.57	0.44	0.45
Avail Cap(c_a), veh/h	657	0	0	723	0	0	433	820	859	87	512	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	0.0	21.8	0.0	0.0	32.4	16.9	16.9	40.4	23.8	23.8
Incr Delay (d2), s/veh	4.6	0.0	0.0	0.6	0.0	0.0	13.0	3.9	3.8	24.2	2.8	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	5.3	0.0	0.0	7.4	10.0	10.5	0.4	4.5	4.6
LnGrp Delay(d),s/veh	29.9	0.0	0.0	22.3	0.0	0.0	45.4	20.8	20.6	64.6	26.5	26.6
LnGrp LOS	C			C			D	C	C	E	C	C
Approach Vol, veh/h		434			293			1370			467	
Approach Delay, s/veh		29.9			22.3			25.8			27.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	44.0		33.1	19.2	29.7		33.1
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	4.0	38.0		32.0	20.0	22.0		32.0
Max Q Clear Time (g_c+I1), s	2.5	20.9		23.3	14.7	10.7		12.3
Green Ext Time (p_c), s	0.0	6.4		2.4	0.5	5.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	19.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	180	1100	140	140	450
Future Vol, veh/h	30	180	1100	140	140	450
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	196	1196	152	152	489

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1832	685	0	0	1359	0
Stage 1	1283	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	68	391	-	-	502	-
Stage 1	224	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	47	386	-	-	502	-
Mov Cap-2 Maneuver	47	-	-	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	180.1	0	3.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	190	502	-
HCM Lane V/C Ratio	-	-	1.201	0.303	-
HCM Control Delay (s)	-	-	180.1	15.3	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	11.9	1.3	-

Intersection	
Int Delay, s/veh	837.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	160	50	120	0	60	90	120	850	10	40	330	170
Future Vol, veh/h	160	50	120	0	60	90	120	850	10	40	330	170
Conflicting Peds, #/hr	3	0	12	12	0	3	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	174	54	130	0	65	98	130	924	11	43	359	185

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1718	1637	374	1738	1637	930	362	0	0	927	0	0
Stage 1	449	449	-	1188	1188	-	-	-	-	-	-	-
Stage 2	1269	1188	-	550	449	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 71	101	672	68	101	324	1197	-	-	737	-	-
Stage 1	589	572	-	230	262	-	-	-	-	-	-	-
Stage 2	206	262	-	519	572	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 16	84	664	23	84	322	1186	-	-	735	-	-
Mov Cap-2 Maneuver	~ 16	84	-	23	84	-	-	-	-	-	-	-
Stage 1	523	537	-	204	233	-	-	-	-	-	-	-
Stage 2	~ 92	233	-	350	537	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 5001.9	155.9	1	0.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1186	-	-	31	151	735	-	-
HCM Lane V/C Ratio	0.11	-	-	11.571	1.08	0.059	-	-
HCM Control Delay (s)	8.4	-	-	$ 5001.9	155.9	10.2	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	44	8.6	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	840	0	20	360
Future Vol, veh/h	0	20	840	0	20	360
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	913	0	22	391

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1356	921	0	0	921	0
Stage 1	921	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	165	328	-	-	741	-
Stage 1	388	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	159	325	-	-	741	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	385	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	325	741	-
HCM Lane V/C Ratio	-	-	0.067	0.029	-
HCM Control Delay (s)	-	-	16.9	10	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Intersection Delay, s/veh	98.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	40	90	10	110	30	280	710	10	20	230	90
Future Vol, veh/h	20	40	90	10	110	30	280	710	10	20	230	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	43	98	11	120	33	304	772	11	22	250	98
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	13.7	14.2	150.2	21.9
HCM LOS	B	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	13%	7%	100%	0%
Vol Thru, %	0%	99%	27%	73%	0%	72%
Vol Right, %	0%	1%	60%	20%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	720	150	150	20	320
LT Vol	280	0	20	10	20	0
Through Vol	0	710	40	110	0	230
RT Vol	0	10	90	30	0	90
Lane Flow Rate	304	783	163	163	22	348
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.581	1.381	0.314	0.323	0.045	0.654
Departure Headway (Hd)	6.874	6.354	7.391	7.603	7.943	7.228
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	523	571	489	476	453	504
Service Time	4.642	4.122	5.391	5.603	5.643	4.928
HCM Lane V/C Ratio	0.581	1.371	0.333	0.342	0.049	0.69
HCM Control Delay	18.8	201.3	13.7	14.2	11	22.6
HCM Lane LOS	C	F	B	B	B	C
HCM 95th-tile Q	3.7	35	1.3	1.4	0.1	4.7

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	20	10	40	30	50	130	0	0	0	0
Future Vol, veh/h	20	30	20	10	40	30	50	130	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	33	22	11	43	33	54	141	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	7.8	8.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	28%	29%	12%
Vol Thru, %	72%	43%	50%
Vol Right, %	0%	29%	38%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	180	70	80
LT Vol	50	20	10
Through Vol	130	30	40
RT Vol	0	20	30
Lane Flow Rate	196	76	87
Geometry Grp	1	1	1
Degree of Util (X)	0.232	0.092	0.103
Departure Headway (Hd)	4.269	4.37	4.274
Convergence, Y/N	Yes	Yes	Yes
Cap	828	824	843
Service Time	2.364	2.373	2.276
HCM Lane V/C Ratio	0.237	0.092	0.103
HCM Control Delay	8.7	7.8	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.3	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	10	10	0	10	30	10	410	0	0	190	20
Future Vol, veh/h	20	10	10	0	10	30	10	410	0	0	190	20
Conflicting Peds, #/hr	5	0	3	3	0	5	3	0	19	19	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	11	11	0	11	33	11	446	0	0	207	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	714	706	223	717	717	470	231	0	0	465	0	0
Stage 1	220	220	-	486	486	-	-	-	-	-	-	-
Stage 2	494	486	-	231	231	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	346	361	817	345	355	594	1337	-	-	1096	-	-
Stage 1	782	721	-	563	551	-	-	-	-	-	-	-
Stage 2	557	551	-	772	713	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	313	348	812	322	343	578	1333	-	-	1090	-	-
Mov Cap-2 Maneuver	313	348	-	322	343	-	-	-	-	-	-	-
Stage 1	771	719	-	545	533	-	-	-	-	-	-	-
Stage 2	506	533	-	748	711	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	13	0.2	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1333	-	-	381	493	1090	-	-
HCM Lane V/C Ratio	0.008	-	-	0.114	0.088	-	-	-
HCM Control Delay (s)	7.7	0	-	15.7	13	0	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	180	10	20	280	80	30	100	40	30	70	20
Future Vol, veh/h	20	180	10	20	280	80	30	100	40	30	70	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	196	11	22	304	87	33	109	43	33	76	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.5	15.2	11.3	10.6
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	10%	5%	25%
Vol Thru, %	59%	86%	74%	58%
Vol Right, %	24%	5%	21%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	210	380	120
LT Vol	30	20	20	30
Through Vol	100	180	280	70
RT Vol	40	10	80	20
Lane Flow Rate	185	228	413	130
Geometry Grp	1	1	1	1
Degree of Util (X)	0.296	0.348	0.587	0.215
Departure Headway (Hd)	5.77	5.486	5.119	5.938
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	621	653	702	601
Service Time	3.827	3.538	3.163	4
HCM Lane V/C Ratio	0.298	0.349	0.588	0.216
HCM Control Delay	11.3	11.5	15.2	10.6
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	1.2	1.6	3.9	0.8

Intersection	
Intersection Delay, s/veh	86.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	240	10	30	350	180	20	270	60	90	130	30
Future Vol, veh/h	30	240	10	30	350	180	20	270	60	90	130	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	261	11	33	380	196	22	293	65	98	141	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	30.4	167.2	43.8	27.4
HCM LOS	D	F	E	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	11%	5%	36%
Vol Thru, %	77%	86%	62%	52%
Vol Right, %	17%	4%	32%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	280	560	250
LT Vol	20	30	30	90
Through Vol	270	240	350	130
RT Vol	60	10	180	30
Lane Flow Rate	380	304	609	272
Geometry Grp	1	1	1	1
Degree of Util (X)	0.842	0.698	1.285	0.638
Departure Headway (Hd)	8.738	9.026	7.599	9.355
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	418	405	481	389
Service Time	6.738	7.026	5.668	7.355
HCM Lane V/C Ratio	0.909	0.751	1.266	0.699
HCM Control Delay	43.8	30.4	167.2	27.4
HCM Lane LOS	E	D	F	D
HCM 95th-tile Q	8	5.2	25.6	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	90	80	130	60	420	30	610	600	370	780	120
Future Volume (veh/h)	100	90	80	130	60	420	30	610	600	370	780	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	109	98	87	141	0	500	33	663	652	402	848	130
Adj No. of Lanes	0	1	0	1	0	2	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	105	93	221	0	411	85	626	552	404	1640	251
Arrive On Green	0.17	0.17	0.17	0.12	0.00	0.12	0.05	0.35	0.35	0.23	0.53	0.53
Sat Flow, veh/h	671	603	535	1774	0	3293	1774	1770	1559	1774	3071	471
Grp Volume(v), veh/h	294	0	0	141	0	500	33	663	652	402	489	489
Grp Sat Flow(s),veh/h/ln	1809	0	0	1774	0	1647	1774	1770	1559	1774	1770	1772
Q Serve(g_s), s	24.1	0.0	0.0	11.3	0.0	18.7	2.7	53.1	53.1	33.9	26.7	26.7
Cycle Q Clear(g_c), s	24.1	0.0	0.0	11.3	0.0	18.7	2.7	53.1	53.1	33.9	26.7	26.7
Prop In Lane	0.37		0.30	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	314	0	0	221	0	411	85	626	552	404	945	946
V/C Ratio(X)	0.94	0.00	0.00	0.64	0.00	1.22	0.39	1.06	1.18	0.99	0.52	0.52
Avail Cap(c_a), veh/h	314	0	0	221	0	411	85	626	552	404	945	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.40	0.40	0.40	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	0.0	0.0	62.4	0.0	65.7	69.3	48.5	48.5	57.8	22.5	22.5
Incr Delay (d2), s/veh	37.1	0.0	0.0	13.2	0.0	118.3	0.4	40.0	89.3	43.0	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	0.0	6.4	0.0	15.3	1.3	32.9	36.5	21.5	13.6	13.6
LnGrp Delay(d),s/veh	98.3	0.0	0.0	75.7	0.0	184.0	69.7	88.5	137.8	100.8	24.5	24.5
LnGrp LOS	F			E		F	E	F	F	F	C	C
Approach Vol, veh/h		294			641			1348			1380	
Approach Delay, s/veh		98.3			160.2			111.9			46.7	
Approach LOS		F			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.4	57.7		30.6	11.4	84.7		23.3
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	34.2	* 53		26.0	7.2	* 80		18.7
Max Q Clear Time (g_c+I1), s	35.9	55.1		26.1	4.7	28.7		20.7
Green Ext Time (p_c), s	0.0	0.0		0.0	0.3	2.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		94.7
HCM 2010 LOS		F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	700	640	330	80	380	190	220	540	50	300	530	100
Future Volume (veh/h)	700	640	330	80	380	190	220	540	50	300	530	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1937	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	761	696	359	87	413	207	239	587	54	326	576	109
Adj No. of Lanes	2	2	1	1	2	1	1	2	0	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	803	1469	650	111	796	353	251	825	76	383	658	124
Arrive On Green	0.23	0.42	0.42	0.06	0.22	0.22	0.14	0.25	0.25	0.11	0.22	0.22
Sat Flow, veh/h	3442	3539	1567	1845	3539	1571	1774	3274	301	3442	2970	560
Grp Volume(v), veh/h	761	696	359	87	413	207	239	317	324	326	343	342
Grp Sat Flow(s),veh/h/ln	1721	1770	1567	1845	1770	1571	1774	1770	1805	1721	1770	1760
Q Serve(g_s), s	26.1	17.2	20.9	5.6	12.3	10.7	16.0	19.6	19.7	11.2	22.4	22.6
Cycle Q Clear(g_c), s	26.1	17.2	20.9	5.6	12.3	10.7	16.0	19.6	19.7	11.2	22.4	22.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.32
Lane Grp Cap(c), veh/h	803	1469	650	111	796	353	251	446	455	383	392	390
V/C Ratio(X)	0.95	0.47	0.55	0.79	0.52	0.59	0.95	0.71	0.71	0.85	0.87	0.88
Avail Cap(c_a), veh/h	803	1469	650	169	796	353	251	446	455	430	413	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.98	0.98	0.98	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	45.3	25.6	26.6	55.6	40.8	23.7	51.1	40.9	40.9	52.4	45.1	45.2
Incr Delay (d2), s/veh	19.8	1.1	3.3	5.9	2.4	6.8	42.9	5.2	5.2	10.8	15.4	16.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.6	8.6	9.6	3.0	6.3	5.3	10.8	10.2	10.5	5.9	12.6	12.7
LnGrp Delay(d),s/veh	65.1	26.7	30.0	61.5	43.1	30.5	94.0	46.1	46.1	63.2	60.5	61.1
LnGrp LOS	E	C	C	E	D	C	F	D	D	E	E	E
Approach Vol, veh/h		1816			707			880			1011	
Approach Delay, s/veh		43.4			41.7			59.1			61.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	55.8	21.0	32.6	34.0	33.0	17.3	36.2
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	11.0	44.0	17.0	28.0	28.0	* 27	15.0	30.0
Max Q Clear Time (g_c+I1), s	7.6	22.9	18.0	24.6	28.1	14.3	13.2	21.7
Green Ext Time (p_c), s	0.0	7.9	0.0	1.7	0.0	2.3	0.2	3.6

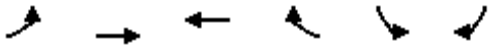
Intersection Summary	
HCM 2010 Ctrl Delay	50.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	130	80	80	50	80	40	620	60	80	790	60
Future Volume (veh/h)	60	130	80	80	50	80	40	620	60	80	790	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	65	141	87	87	54	87	43	674	65	87	859	65
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	272	150	203	133	168	55	920	777	112	980	821
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.49	0.49	0.06	0.53	0.53
Sat Flow, veh/h	282	936	514	482	455	578	1774	1863	1574	1774	1863	1559
Grp Volume(v), veh/h	293	0	0	228	0	0	43	674	65	87	859	65
Grp Sat Flow(s),veh/h/ln	1731	0	0	1516	0	0	1774	1863	1574	1774	1863	1559
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	1.9	22.7	1.7	3.8	32.0	1.6
Cycle Q Clear(g_c), s	10.7	0.0	0.0	9.4	0.0	0.0	1.9	22.7	1.7	3.8	32.0	1.6
Prop In Lane	0.22		0.30	0.38		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	559	0	0	504	0	0	55	920	777	112	980	821
V/C Ratio(X)	0.52	0.00	0.00	0.45	0.00	0.00	0.78	0.73	0.08	0.77	0.88	0.08
Avail Cap(c_a), veh/h	559	0	0	504	0	0	90	1084	916	202	1202	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	0.0	23.0	0.0	0.0	38.0	15.9	10.6	36.5	16.5	9.3
Incr Delay (d2), s/veh	3.5	0.0	0.0	2.9	0.0	0.0	21.1	2.1	0.0	10.8	6.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	0.0	4.5	0.0	0.0	1.3	12.2	0.8	2.2	18.0	0.7
LnGrp Delay(d),s/veh	27.1	0.0	0.0	25.9	0.0	0.0	59.2	18.0	10.6	47.2	22.9	9.3
LnGrp LOS	C			C			E	B	B	D	C	A
Approach Vol, veh/h		293			228			782			1011	
Approach Delay, s/veh		27.1			25.9			19.7			24.1	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	43.0		27.0	6.4	45.6		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	46.0		23.0	4.0	51.0		23.0
Max Q Clear Time (g_c+I1), s	5.8	24.7		12.7	3.9	34.0		11.4
Green Ext Time (p_c), s	0.1	8.4		1.7	0.0	7.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	680	500	10	140	150
Future Volume (veh/h)	160	680	500	10	140	150
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	174	739	543	11	152	163
Adj No. of Lanes	1	2	2	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	217	2762	2192	44	232	211
Arrive On Green	0.12	0.78	1.00	1.00	0.13	0.13
Sat Flow, veh/h	1845	3632	3639	72	1774	1615
Grp Volume(v), veh/h	174	739	271	283	152	163
Grp Sat Flow(s),veh/h/ln	1845	1770	1770	1848	1774	1615
Q Serve(g_s), s	8.3	5.2	0.0	0.0	7.3	8.8
Cycle Q Clear(g_c), s	8.3	5.2	0.0	0.0	7.3	8.8
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	217	2762	1094	1142	232	211
V/C Ratio(X)	0.80	0.27	0.25	0.25	0.66	0.77
Avail Cap(c_a), veh/h	472	2762	1094	1142	434	395
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	38.7	2.7	0.0	0.0	37.2	37.8
Incr Delay (d2), s/veh	5.1	0.2	0.5	0.5	3.1	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.5	0.2	0.2	3.8	7.9
LnGrp Delay(d),s/veh	43.8	2.9	0.5	0.5	40.3	43.7
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		913	554		315	
Approach Delay, s/veh		10.7	0.5		42.1	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		74.2		15.8	14.6	59.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		60.0		22.0	23.0	33.0		
Max Q Clear Time (g_c+I1), s		7.2		10.8	10.3	2.0		
Green Ext Time (p_c), s		6.8		1.0	0.5	6.5		

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	660	130	30	410	10	90	40	30	50	30	70
Future Volume (veh/h)	90	660	130	30	410	10	90	40	30	50	30	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.97	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1900	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	98	717	141	33	446	11	98	43	33	54	33	76
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1944	382	46	2173	54	172	74	43	207	112	281
Arrive On Green	0.14	1.00	1.00	0.02	0.62	0.62	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1845	2947	579	1845	3527	87	599	406	235	779	615	1545
Grp Volume(v), veh/h	98	430	428	33	223	234	174	0	0	87	0	76
Grp Sat Flow(s),veh/h/ln	1845	1770	1756	1845	1770	1844	1240	0	0	1394	0	1545
Q Serve(g_s), s	4.6	0.0	0.0	1.6	5.0	5.0	8.2	0.0	0.0	0.0	0.0	3.8
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.6	5.0	5.0	12.8	0.0	0.0	4.7	0.0	3.8
Prop In Lane	1.00		0.33	1.00		0.05	0.56		0.19	0.62		1.00
Lane Grp Cap(c), veh/h	127	1167	1159	46	1090	1136	288	0	0	319	0	281
V/C Ratio(X)	0.77	0.37	0.37	0.72	0.20	0.21	0.60	0.00	0.00	0.27	0.00	0.27
Avail Cap(c_a), veh/h	287	1167	1159	144	1090	1136	464	0	0	493	0	463
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.91	0.91	0.91	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	0.0	43.6	7.6	7.6	36.1	0.0	0.0	31.9	0.0	31.7
Incr Delay (d2), s/veh	9.0	0.8	0.8	17.2	0.4	0.4	2.0	0.0	0.0	0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.3	0.3	1.0	2.5	2.6	4.3	0.0	0.0	1.9	0.0	1.7
LnGrp Delay(d),s/veh	47.2	0.8	0.8	60.7	8.0	8.0	38.2	0.0	0.0	32.3	0.0	32.2
LnGrp LOS	D	A	A	E	A	A	D			C		C
Approach Vol, veh/h		956			490			174			163	
Approach Delay, s/veh		5.6			11.5			38.2			32.3	
Approach LOS		A			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.4		20.4	10.2	59.4		20.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	44.0		27.0	14.0	37.0		27.0
Max Q Clear Time (g_c+I1), s	3.6	2.0		6.7	6.6	7.0		14.8
Green Ext Time (p_c), s	0.0	6.3		1.9	0.1	6.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	560	70	40	350	70	80	270	20	130	310	180
Future Volume (veh/h)	80	560	70	40	350	70	80	270	20	130	310	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1937	1863	1900	1863	1863	1863	1863	1937	1900
Adj Flow Rate, veh/h	87	609	76	43	380	76	87	293	22	141	337	196
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	1061	132	57	891	176	112	560	464	179	394	229
Arrive On Green	0.06	0.34	0.34	0.03	0.31	0.31	0.06	0.30	0.30	0.10	0.34	0.34
Sat Flow, veh/h	1845	3151	392	1845	2912	574	1774	1863	1545	1774	1144	665
Grp Volume(v), veh/h	87	341	344	43	229	227	87	293	22	141	0	533
Grp Sat Flow(s),veh/h/ln	1845	1770	1774	1845	1770	1716	1774	1863	1545	1774	0	1809
Q Serve(g_s), s	3.7	12.7	12.8	1.9	8.3	8.5	3.9	10.5	0.8	6.2	0.0	21.9
Cycle Q Clear(g_c), s	3.7	12.7	12.8	1.9	8.3	8.5	3.9	10.5	0.8	6.2	0.0	21.9
Prop In Lane	1.00		0.22	1.00		0.33	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	113	596	597	57	542	526	112	560	464	179	0	624
V/C Ratio(X)	0.77	0.57	0.58	0.76	0.42	0.43	0.78	0.52	0.05	0.79	0.00	0.85
Avail Cap(c_a), veh/h	161	596	597	92	542	526	177	576	478	347	0	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.1	21.8	21.9	38.6	22.2	22.2	37.0	23.3	19.9	35.2	0.0	24.4
Incr Delay (d2), s/veh	13.1	4.0	4.0	18.4	2.4	2.6	11.0	0.8	0.0	7.4	0.0	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.8	6.9	1.2	4.4	4.4	2.2	5.5	0.3	3.4	0.0	12.4
LnGrp Delay(d),s/veh	50.1	25.8	25.9	56.9	24.6	24.8	48.0	24.1	19.9	42.6	0.0	32.7
LnGrp LOS	D	C	C	E	C	C	D	C	B	D		C
Approach Vol, veh/h		772			499			402			674	
Approach Delay, s/veh		28.6			27.5			29.0			34.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	33.0	9.1	31.6	8.9	30.5	12.6	28.1
Change Period (Y+Rc), s	4.0	6.0	4.0	4.0	4.0	6.0	4.5	4.0
Max Green Setting (Gmax), s	4.0	27.0	8.0	33.0	7.0	24.0	15.7	24.8
Max Q Clear Time (g_c+I1), s	3.9	14.8	5.9	23.9	5.7	10.5	8.2	12.5
Green Ext Time (p_c), s	0.0	3.9	0.0	3.7	0.0	4.1	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	530	40	50	340	20	10	40	30	40	220	320
Future Volume (veh/h)	450	530	40	50	340	20	10	40	30	40	220	320
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.91	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1937	1863	1900	1863	1863	1900	1863	1937	1900	1863	1937	1900
Adj Flow Rate, veh/h	489	576	43	54	370	22	11	43	33	43	239	348
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	1428	106	69	625	37	19	320	246	54	238	347
Arrive On Green	0.28	0.43	0.43	0.04	0.19	0.19	0.01	0.32	0.32	0.03	0.34	0.34
Sat Flow, veh/h	1845	3325	248	1774	3374	199	1774	1014	778	1774	710	1034
Grp Volume(v), veh/h	489	306	313	54	193	199	11	0	76	43	0	587
Grp Sat Flow(s),veh/h/ln	1845	1770	1803	1774	1770	1803	1774	0	1792	1774	0	1745
Q Serve(g_s), s	22.3	10.3	10.4	2.6	8.6	8.7	0.5	0.0	2.6	2.1	0.0	29.0
Cycle Q Clear(g_c), s	22.3	10.3	10.4	2.6	8.6	8.7	0.5	0.0	2.6	2.1	0.0	29.0
Prop In Lane	1.00		0.14	1.00		0.11	1.00		0.43	1.00		0.59
Lane Grp Cap(c), veh/h	523	760	774	69	328	334	19	0	566	54	0	586
V/C Ratio(X)	0.94	0.40	0.40	0.78	0.59	0.60	0.58	0.00	0.13	0.80	0.00	1.00
Avail Cap(c_a), veh/h	534	760	774	144	328	334	82	0	566	123	0	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.2	17.0	17.0	41.2	32.2	32.2	42.5	0.0	21.1	41.6	0.0	28.7
Incr Delay (d2), s/veh	23.9	1.6	1.6	17.3	7.6	7.6	24.7	0.0	0.5	22.5	0.0	37.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.7	5.3	5.5	1.6	4.9	5.1	0.4	0.0	1.4	1.4	0.0	20.0
LnGrp Delay(d),s/veh	54.1	18.6	18.6	58.5	39.8	39.9	67.2	0.0	21.6	64.1	0.0	66.5
LnGrp LOS	D	B	B	E	D	D	E		C	E		F
Approach Vol, veh/h		1108			446			87			630	
Approach Delay, s/veh		34.2			42.1			27.4			66.3	
Approach LOS		C			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.5	20.0	4.9	33.0	7.4	41.1	6.6	31.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	16.0	4.0	29.0	7.0	34.0	6.0	27.0
Max Q Clear Time (g_c+I1), s	24.3	10.7	2.5	31.0	4.6	12.4	4.1	4.6
Green Ext Time (p_c), s	0.1	2.7	0.0	0.0	0.0	6.4	0.0	5.1

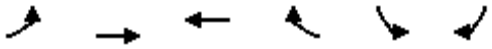
Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	450	120	80	290	70	150	580	80	100	870	20
Future Volume (veh/h)	40	450	120	80	290	70	150	580	80	100	870	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	489	130	87	315	76	163	630	87	109	946	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	869	229	111	916	216	169	1018	140	137	1092	25
Arrive On Green	0.03	0.32	0.32	0.06	0.33	0.33	0.10	0.33	0.33	0.08	0.31	0.31
Sat Flow, veh/h	1774	2710	713	1774	2785	656	1774	3110	429	1774	3534	82
Grp Volume(v), veh/h	43	318	301	87	197	194	163	358	359	109	474	494
Grp Sat Flow(s),veh/h/ln	1774	1770	1654	1774	1770	1671	1774	1770	1769	1774	1770	1847
Q Serve(g_s), s	2.3	14.0	14.3	4.6	7.9	8.3	8.6	16.1	16.1	5.7	23.8	23.8
Cycle Q Clear(g_c), s	2.3	14.0	14.3	4.6	7.9	8.3	8.6	16.1	16.1	5.7	23.8	23.8
Prop In Lane	1.00		0.43	1.00		0.39	1.00		0.24	1.00		0.04
Lane Grp Cap(c), veh/h	59	567	530	111	582	550	169	579	579	137	547	571
V/C Ratio(X)	0.73	0.56	0.57	0.78	0.34	0.35	0.96	0.62	0.62	0.80	0.87	0.87
Avail Cap(c_a), veh/h	94	567	530	169	582	550	169	582	582	151	563	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	26.5	26.6	43.5	23.9	24.0	42.5	26.7	26.7	42.8	30.7	30.7
Incr Delay (d2), s/veh	15.7	4.0	4.4	12.1	1.6	1.8	57.9	2.0	2.0	23.4	13.1	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	7.4	7.2	2.6	4.1	4.1	6.9	8.2	8.2	3.7	13.6	14.1
LnGrp Delay(d),s/veh	60.8	30.5	31.0	55.7	25.5	25.8	100.3	28.7	28.7	66.2	43.9	43.4
LnGrp LOS	E	C	C	E	C	C	F	C	C	E	D	D
Approach Vol, veh/h		662			478			880			1077	
Approach Delay, s/veh		32.7			31.1			42.0			45.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	36.2	13.0	35.1	9.1	37.0	11.3	36.9
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	9.0	27.0	9.0	30.0	5.0	* 31	8.0	31.0
Max Q Clear Time (g_c+I1), s	6.6	16.3	10.6	25.8	4.3	10.3	7.7	18.1
Green Ext Time (p_c), s	0.0	2.2	0.0	2.7	0.0	1.4	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

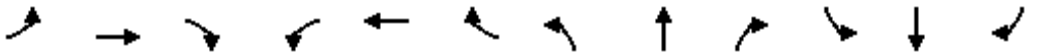
Notes



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	580	370	180	250	130
Future Volume (veh/h)	80	580	370	180	250	130
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1937
Adj Flow Rate, veh/h	87	630	402	196	272	141
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	114	2424	1990	1199	352	327
Arrive On Green	0.06	0.68	0.56	0.56	0.20	0.20
Sat Flow, veh/h	1774	3632	3632	1573	1774	1647
Grp Volume(v), veh/h	87	630	402	196	272	141
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1573	1774	1647
Q Serve(g_s), s	3.3	4.7	3.9	2.3	10.0	5.2
Cycle Q Clear(g_c), s	3.3	4.7	3.9	2.3	10.0	5.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	114	2424	1990	1199	352	327
V/C Ratio(X)	0.76	0.26	0.20	0.16	0.77	0.43
Avail Cap(c_a), veh/h	414	2424	1990	1199	905	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	4.1	7.4	2.2	26.0	24.1
Incr Delay (d2), s/veh	9.9	0.3	0.2	0.3	3.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.4	1.9	1.9	5.2	4.9
LnGrp Delay(d),s/veh	41.5	4.4	7.7	2.5	29.7	25.0
LnGrp LOS	D	A	A	A	C	C
Approach Vol, veh/h		717	598		413	
Approach Delay, s/veh		8.9	6.0		28.1	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		51.0		17.6	8.4	42.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		47.0		35.0	16.0	27.0		
Max Q Clear Time (g_c+I1), s		6.7		12.0	5.3	5.9		
Green Ext Time (p_c), s		6.4		1.7	0.2	5.7		

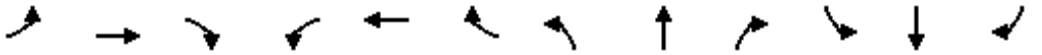
Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	420	710	170	250	0	510	0	130	0	0	0
Future Volume (vph)	0	420	710	170	250	0	510	0	130	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	9	12	12	12	11	12	10	12	12	16
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95	1.00	1.00	0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00	0.98			
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Frt		1.00	0.85	1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3539	1405	1770	3539		1625	1681	1447			
Flt Permitted		1.00	1.00	0.95	1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3539	1405	1770	3539		1625	1681	1447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	457	772	185	272	0	554	0	141	0	0	0
RTOR Reduction (vph)	0	0	260	0	0	0	0	0	96	0	0	0
Lane Group Flow (vph)	0	457	512	185	272	0	277	277	45	0	0	0
Confl. Peds. (#/hr)	5		15			5			8			
Confl. Bikes (#/hr)						1						
Turn Type	Perm	NA	pm+ov	Prot	NA		Split	NA	Perm			Perm
Protected Phases		2	8	1	6		8	8				
Permitted Phases	2		2						8			4
Actuated Green, G (s)		19.2	39.0	11.1	34.3		19.8	19.8	19.8			
Effective Green, g (s)		19.2	39.0	11.1	34.3		19.8	19.8	19.8			
Actuated g/C Ratio		0.31	0.63	0.18	0.55		0.32	0.32	0.32			
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		1094	972	316	1954		518	535	461			
v/s Ratio Prot		0.13	c0.17	c0.10	0.08		0.17	0.16				
v/s Ratio Perm			0.20						0.03			
v/c Ratio		0.42	0.53	0.59	0.14		0.53	0.52	0.10			
Uniform Delay, d1		17.0	6.4	23.4	6.7		17.4	17.3	14.9			
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		1.2	0.5	2.8	0.1		1.1	0.8	0.1			
Delay (s)		18.2	6.9	26.1	6.9		18.4	18.1	15.0			
Level of Service		B	A	C	A		B	B	B			
Approach Delay (s)		11.1			14.7			17.6			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
Description: Broadway/Kempf			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	490	20	20	300	20	50	0	50	20	0	10
Future Volume (veh/h)	20	490	20	20	300	20	50	0	50	20	0	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	22	533	22	22	326	22	54	0	54	22	0	11
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	1468	60	34	1328	89	98	0	563	98	0	563
Arrive On Green	0.05	0.42	0.42	0.02	0.40	0.40	0.36	0.00	0.36	0.36	0.00	0.36
Sat Flow, veh/h	1774	3462	143	1774	3359	225	24	0	1575	23	0	1575
Grp Volume(v), veh/h	22	272	283	22	171	177	54	0	54	22	0	11
Grp Sat Flow(s),veh/h/ln	1774	1770	1835	1774	1770	1815	24	0	1575	23	0	1575
Q Serve(g_s), s	1.0	8.4	8.4	1.0	5.2	5.2	0.5	0.0	1.8	0.5	0.0	0.4
Cycle Q Clear(g_c), s	1.0	8.4	8.4	1.0	5.2	5.2	28.7	0.0	1.8	28.7	0.0	0.4
Prop In Lane	1.00		0.08	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	750	778	34	699	717	98	0	563	98	0	563
V/C Ratio(X)	0.26	0.36	0.36	0.65	0.24	0.25	0.55	0.00	0.10	0.22	0.00	0.02
Avail Cap(c_a), veh/h	265	750	778	177	699	717	156	0	628	153	0	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.8	15.7	15.7	39.1	16.2	16.3	40.1	0.0	17.1	40.0	0.0	16.7
Incr Delay (d2), s/veh	1.6	1.4	1.3	18.8	0.8	0.8	4.7	0.0	0.1	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.4	4.5	0.7	2.7	2.8	1.3	0.0	0.8	0.5	0.0	0.2
LnGrp Delay(d),s/veh	38.4	17.1	17.1	57.9	17.1	17.1	44.8	0.0	17.2	41.2	0.0	16.7
LnGrp LOS	D	B	B	E	B	B	D		B	D		B
Approach Vol, veh/h		577			370			108			33	
Approach Delay, s/veh		17.9			19.5			31.0			33.0	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	40.0		35.1	7.9	37.7		35.1
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	34.0		32.0	12.0	30.0		32.0
Max Q Clear Time (g_c+I1), s	3.0	10.4		30.7	3.0	7.2		30.7
Green Ext Time (p_c), s	0.0	3.5		0.1	0.0	3.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	80	270	80	40	30	640	10	10	430	70
Future Volume (veh/h)	110	10	80	270	80	40	30	640	10	10	430	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1900	1937	1900	1900	1937	1900
Adj Flow Rate, veh/h	120	11	87	293	87	43	33	696	11	11	467	76
Adj No. of Lanes	0	1	1	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	513	44	650	469	484	239	66	803	12	50	713	114
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1045	106	1579	1291	1177	582	47	1811	28	13	1608	258
Grp Volume(v), veh/h	131	0	87	293	0	130	740	0	0	554	0	0
Grp Sat Flow(s),veh/h/ln	1151	0	1579	1291	0	1758	1886	0	0	1879	0	0
Q Serve(g_s), s	5.7	0.0	2.8	17.1	0.0	3.9	10.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.5	0.0	2.8	26.6	0.0	3.9	29.4	0.0	0.0	19.2	0.0	0.0
Prop In Lane	0.92		1.00	1.00		0.33	0.04		0.01	0.02		0.14
Lane Grp Cap(c), veh/h	557	0	650	469	0	723	882	0	0	878	0	0
V/C Ratio(X)	0.24	0.00	0.13	0.62	0.00	0.18	0.84	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	557	0	650	469	0	723	1045	0	0	1040	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.3	0.0	15.2	26.5	0.0	15.5	20.8	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.4	6.2	0.0	0.5	5.4	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.3	6.9	0.0	2.0	16.5	0.0	0.0	10.1	0.0	0.0
LnGrp Delay(d),s/veh	19.3	0.0	15.6	32.7	0.0	16.0	26.2	0.0	0.0	19.1	0.0	0.0
LnGrp LOS	B		B	C		B	C			B		
Approach Vol, veh/h		218			423			740			554	
Approach Delay, s/veh		17.8			27.6			26.2			19.1	
Approach LOS		B			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.0		42.7		40.0		42.7
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		34.0		44.0		34.0		44.0
Max Q Clear Time (g_c+I1), s		11.5		21.2		28.6		31.4
Green Ext Time (p_c), s		3.0		6.8		1.5		5.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	90	210	280	0	110	20	140	0	10	20
Future Volume (veh/h)	10	10	90	210	280	0	110	20	140	0	10	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1976	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	11	98	228	304	0	120	22	152	0	11	22
Adj No. of Lanes	1	1	0	1	1	0	0	1	2	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	49	437	269	829	0	285	52	524	0	97	194
Arrive On Green	0.01	0.30	0.30	0.15	0.44	0.00	0.19	0.19	0.19	0.00	0.18	0.18
Sat Flow, veh/h	1774	161	1437	1774	1863	0	1510	277	2772	0	545	1089
Grp Volume(v), veh/h	11	0	109	228	304	0	142	0	152	0	0	33
Grp Sat Flow(s),veh/h/ln	1774	0	1598	1774	1863	0	1787	0	1386	0	0	1634
Q Serve(g_s), s	0.6	0.0	4.6	11.3	9.7	0.0	6.3	0.0	4.2	0.0	0.0	1.5
Cycle Q Clear(g_c), s	0.6	0.0	4.6	11.3	9.7	0.0	6.3	0.0	4.2	0.0	0.0	1.5
Prop In Lane	1.00		0.90	1.00		0.00	0.85		1.00	0.00		0.67
Lane Grp Cap(c), veh/h	19	0	486	269	829	0	338	0	524	0	0	291
V/C Ratio(X)	0.58	0.00	0.22	0.85	0.37	0.00	0.42	0.00	0.29	0.00	0.00	0.11
Avail Cap(c_a), veh/h	79	0	486	434	829	0	338	0	524	0	0	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.97	1.00	1.00	0.00	0.48	0.00	0.48	0.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	0.0	23.4	37.2	16.6	0.0	32.2	0.0	31.3	0.0	0.0	31.0
Incr Delay (d2), s/veh	24.5	0.0	1.0	8.5	1.3	0.0	1.8	0.0	0.7	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.2	6.1	5.3	0.0	3.3	0.0	1.7	0.0	0.0	0.8
LnGrp Delay(d),s/veh	68.8	0.0	24.4	45.7	17.8	0.0	34.0	0.0	32.0	0.0	0.0	31.8
LnGrp LOS	E		C	D	B		C		C			C
Approach Vol, veh/h		120			532			294			33	
Approach Delay, s/veh		28.5			29.8			33.0			31.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.6	31.4		20.0	5.0	44.0		21.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	19.0		16.0	4.0	37.0		17.0
Max Q Clear Time (g_c+I1), s	13.3	6.6		3.5	2.6	11.7		8.3
Green Ext Time (p_c), s	0.4	2.0		0.1	0.0	2.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	31.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	90	20	20	110	20	200	170	40	20	410	60
Future Vol, veh/h	70	90	20	20	110	20	200	170	40	20	410	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	98	22	22	120	22	217	185	43	22	446	65
Number of Lanes	0	1	0	0	1	0	1	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	1	1
HCM Control Delay	17.2	15.6	15	55.1
HCM LOS	C	C	B	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	39%	13%	5%	0%
Vol Thru, %	0%	100%	0%	50%	73%	95%	0%
Vol Right, %	0%	0%	100%	11%	13%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	200	170	40	180	150	430	60
LT Vol	200	0	0	70	20	20	0
Through Vol	0	170	0	90	110	410	0
RT Vol	0	0	40	20	20	0	60
Lane Flow Rate	217	185	43	196	163	467	65
Geometry Grp	7	7	7	7	7	8	8
Degree of Util (X)	0.463	0.367	0.078	0.441	0.367	0.97	0.122
Departure Headway (Hd)	7.66	7.147	6.427	8.121	8.106	7.473	6.729
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	470	501	555	442	442	486	531
Service Time	5.432	4.918	4.198	5.895	5.884	5.241	4.497
HCM Lane V/C Ratio	0.462	0.369	0.077	0.443	0.369	0.961	0.122
HCM Control Delay	16.9	14	9.7	17.2	15.6	61.3	10.4
HCM Lane LOS	C	B	A	C	C	F	B
HCM 95th-tile Q	2.4	1.7	0.3	2.2	1.7	12.3	0.4

Intersection	
Intersection Delay, s/veh	283.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	0	1050	0	0	0	0	740	390	160	1040	0
Future Vol, veh/h	110	0	1050	0	0	0	0	740	390	160	1040	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	120	0	1141	0	0	0	0	804	424	174	1130	0
Number of Lanes	1	0	2	0	0	0	0	2	1	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	3	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	3
HCM Control Delay	97.9	128.7	607.7
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	0%	32%	0%
Vol Thru, %	100%	100%	0%	0%	0%	0%	68%	100%
Vol Right, %	0%	0%	100%	0%	100%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	370	370	390	110	525	525	507	693
LT Vol	0	0	0	110	0	0	160	0
Through Vol	370	370	0	0	0	0	347	693
RT Vol	0	0	390	0	525	525	0	0
Lane Flow Rate	402	402	424	120	571	571	551	754
Geometry Grp	8	8	8	7	7	7	8	8
Degree of Util (X)	1.17	1.17	0.947	0.316	1.32	1.045	1.879	2.538
Departure Headway (Hd)	15.535	15.535	13.101	5.114	3.928	2.215	13.848	13.684
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	237	237	280	705	924	1632	270	271
Service Time	13.235	13.235	10.801	2.814	1.628	-0.085	11.548	11.384
HCM Lane V/C Ratio	1.696	1.696	1.514	0.17	0.618	0.35	2.041	2.782
HCM Control Delay	154.7	154.7	79.5	10.2	165.3	48.9	439.8	730.4
HCM Lane LOS	F	F	F	B	F	F	F	F
HCM 95th-tile Q	12.8	12.8	9	1.4	46.4	30.2	34	55.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	80	970	10	30	0	710	60	10	0	40	270
Future Volume (veh/h)	160	80	970	10	30	0	710	60	10	0	40	270
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	174	87	1054	11	33	0	772	65	11	0	43	293
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	441	221	1023	14	43	0	847	754	128	0	331	281
Arrive On Green	0.12	0.12	0.12	0.03	0.03	0.00	0.25	0.47	0.47	0.00	0.18	0.18
Sat Flow, veh/h	1202	601	2787	460	1380	0	3442	1610	272	0	1863	1583
Grp Volume(v), veh/h	261	0	1054	44	0	0	772	0	76	0	43	293
Grp Sat Flow(s),veh/h/ln	1803	0	1393	1840	0	0	1721	0	1882	0	1863	1583
Q Serve(g_s), s	12.0	0.0	33.0	2.1	0.0	0.0	19.6	0.0	2.0	0.0	1.7	16.0
Cycle Q Clear(g_c), s	12.0	0.0	33.0	2.1	0.0	0.0	19.6	0.0	2.0	0.0	1.7	16.0
Prop In Lane	0.67		1.00	0.25		0.00	1.00		0.14	0.00		1.00
Lane Grp Cap(c), veh/h	662	0	1023	58	0	0	847	0	881	0	331	281
V/C Ratio(X)	0.39	0.00	1.03	0.76	0.00	0.00	0.91	0.00	0.09	0.00	0.13	1.04
Avail Cap(c_a), veh/h	662	0	1023	327	0	0	880	0	899	0	331	281
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.74	0.00	0.74	0.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	39.5	43.3	0.0	0.0	33.0	0.0	13.3	0.0	31.1	37.0
Incr Delay (d2), s/veh	1.8	0.0	36.2	18.4	0.0	0.0	10.4	0.0	0.0	0.0	0.2	64.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	17.9	1.4	0.0	0.0	10.6	0.0	1.0	0.0	0.9	12.0
LnGrp Delay(d),s/veh	32.1	0.0	75.8	61.7	0.0	0.0	43.4	0.0	13.3	0.0	31.3	101.7
LnGrp LOS	C		F	E			D		B		C	F
Approach Vol, veh/h		1315			44			848			336	
Approach Delay, s/veh		67.1			61.7			40.7			92.7	
Approach LOS		E			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		37.0	26.1	20.0		6.8		46.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		19.0	23.0	16.0		16.0		43.0
Max Q Clear Time (g_c+I1), s		35.0	21.6	18.0		4.1		4.0
Green Ext Time (p_c), s		0.0	0.5	0.0		0.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	61.6
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	90	800	40	50	930
Future Vol, veh/h	10	90	800	40	50	930
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	98	870	43	54	1011

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1541	493	0	0	949	0
Stage 1	927	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	106	522	-	-	719	-
Stage 1	346	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	84	501	-	-	719	-
Mov Cap-2 Maneuver	84	-	-	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	416	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.8	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	335	719	-
HCM Lane V/C Ratio	-	-	0.324	0.076	-
HCM Control Delay (s)	-	-	20.8	10.4	0.8
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	70	350	60	70	20	210	690	10	20	820	60
Future Volume (veh/h)	170	70	350	60	70	20	210	690	10	20	820	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	185	76	380	65	76	22	228	750	11	22	891	65
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	76	342	191	213	54	256	1559	23	33	1039	76
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.14	0.44	0.44	0.02	0.31	0.31
Sat Flow, veh/h	432	208	932	369	580	148	1774	3569	52	1774	3338	244
Grp Volume(v), veh/h	641	0	0	163	0	0	228	372	389	22	472	484
Grp Sat Flow(s),veh/h/ln	1573	0	0	1097	0	0	1774	1770	1852	1774	1770	1812
Q Serve(g_s), s	25.2	0.0	0.0	0.0	0.0	0.0	11.4	13.5	13.5	1.1	22.6	22.6
Cycle Q Clear(g_c), s	33.0	0.0	0.0	7.8	0.0	0.0	11.4	13.5	13.5	1.1	22.6	22.6
Prop In Lane	0.29		0.59	0.40		0.13	1.00		0.03	1.00		0.13
Lane Grp Cap(c), veh/h	628	0	0	458	0	0	256	773	809	33	551	564
V/C Ratio(X)	1.02	0.00	0.00	0.36	0.00	0.00	0.89	0.48	0.48	0.66	0.86	0.86
Avail Cap(c_a), veh/h	628	0	0	458	0	0	256	773	809	99	551	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	0.0	0.0	20.1	0.0	0.0	37.8	18.1	18.1	43.9	29.1	29.1
Incr Delay (d2), s/veh	41.2	0.0	0.0	0.5	0.0	0.0	29.4	2.1	2.0	20.0	15.8	15.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.7	0.0	0.0	3.0	0.0	0.0	7.7	7.0	7.3	0.7	13.4	13.7
LnGrp Delay(d),s/veh	70.7	0.0	0.0	20.6	0.0	0.0	67.2	20.2	20.1	63.8	45.0	44.6
LnGrp LOS	F			C			E	C	C	E	D	D
Approach Vol, veh/h		641			163			989			978	
Approach Delay, s/veh		70.7			20.6			31.0			45.2	
Approach LOS		E			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	45.3		39.0	17.0	34.0		39.0
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	36.0		33.0	13.0	28.0		33.0
Max Q Clear Time (g_c+I1), s	3.1	15.5		35.0	13.4	24.6		9.8
Green Ext Time (p_c), s	0.0	7.7		0.0	0.0	2.3		4.4

Intersection Summary	
HCM 2010 Ctrl Delay	44.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	60	800	40	100	1070
Future Vol, veh/h	20	60	800	40	100	1070
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	65	870	43	109	1163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1701	468	0	0	924	0
Stage 1	902	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	83	542	-	-	735	-
Stage 1	356	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	535	-	-	735	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	352	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.9	0	0.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	201	735	-
HCM Lane V/C Ratio	-	-	0.433	0.148	-
HCM Control Delay (s)	-	-	35.9	10.7	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	2	0.5	-

Intersection	
Int Delay, s/veh	293.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	210	20	110	0	10	40	80	400	10	70	750	140
Future Vol, veh/h	210	20	110	0	10	40	80	400	10	70	750	140
Conflicting Peds, #/hr	3	0	12	12	0	3	3	0	3	3	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	50	70	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	228	22	120	0	11	43	87	435	11	76	815	152

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1609	1582	830	1662	1582	441	818	0	0	438	0	0
Stage 1	970	970	-	612	612	-	-	-	-	-	-	-
Stage 2	639	612	-	1050	970	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 84	109	370	77	109	616	810	-	-	1122	-	-
Stage 1	304	331	-	480	484	-	-	-	-	-	-	-
Stage 2	464	484	-	275	331	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 61	90	365	36	90	612	803	-	-	1119	-	-
Mov Cap-2 Maneuver	~ 61	90	-	36	90	-	-	-	-	-	-	-
Stage 1	270	307	-	427	430	-	-	-	-	-	-	-
Stage 2	374	430	-	159	307	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1583.3	20.7	1.6	0.6
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	803	-	-	86	283	1119	-	-
HCM Lane V/C Ratio	0.108	-	-	4.297	0.192	0.068	-	-
HCM Control Delay (s)	10	-	-	$ 1583.3	20.7	8.5	-	-
HCM Lane LOS	B	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	39	0.7	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	400	0	20	690
Future Vol, veh/h	0	10	400	0	20	690
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	435	0	22	750

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1236	443	0	0	443	0
Stage 1	443	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	195	615	-	-	1117	-
Stage 1	647	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	189	610	-	-	1117	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	437	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	610	1117	-
HCM Lane V/C Ratio	-	-	0.018	0.019	-
HCM Control Delay (s)	-	-	11	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Intersection Delay, s/veh	68.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	70	180	10	30	10	90	300	10	20	570	40
Future Vol, veh/h	40	70	180	10	30	10	90	300	10	20	570	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	76	196	11	33	11	98	326	11	22	620	43
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	18.9	12.5	19.3	127.9
HCM LOS	C	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	14%	20%	100%	0%
Vol Thru, %	0%	97%	24%	60%	0%	93%
Vol Right, %	0%	3%	62%	20%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	310	290	50	20	610
LT Vol	90	0	40	10	20	0
Through Vol	0	300	70	30	0	570
RT Vol	0	10	180	10	0	40
Lane Flow Rate	98	337	315	54	22	663
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.198	0.632	0.572	0.117	0.043	1.207
Departure Headway (Hd)	7.665	7.128	6.995	8.407	7.11	6.552
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	472	509	520	429	502	550
Service Time	5.365	4.828	4.995	6.407	4.882	4.324
HCM Lane V/C Ratio	0.208	0.662	0.606	0.126	0.044	1.205
HCM Control Delay	12.2	21.3	18.9	12.5	10.2	131.8
HCM Lane LOS	B	C	C	B	B	F
HCM 95th-tile Q	0.7	4.3	3.6	0.4	0.1	24.2

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	40	40	0	30	20	20	80	10	0	0	0
Future Vol, veh/h	40	40	40	0	30	20	20	80	10	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	43	43	0	33	22	22	87	11	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	0	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	7.4	8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	18%	33%	0%
Vol Thru, %	73%	33%	60%
Vol Right, %	9%	33%	40%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	110	120	50
LT Vol	20	40	0
Through Vol	80	40	30
RT Vol	10	40	20
Lane Flow Rate	120	130	54
Geometry Grp	1	1	1
Degree of Util (X)	0.141	0.147	0.06
Departure Headway (Hd)	4.232	4.052	4.004
Convergence, Y/N	Yes	Yes	Yes
Cap	836	873	878
Service Time	2.314	2.132	2.102
HCM Lane V/C Ratio	0.144	0.149	0.062
HCM Control Delay	8	7.8	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.5	0.2

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	20	10	0	10	40	10	230	10	20	390	30
Future Vol, veh/h	20	20	10	0	10	40	10	230	10	20	390	30
Conflicting Peds, #/hr	5	0	3	3	0	5	3	0	19	19	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	22	11	0	11	43	11	250	11	22	424	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	796	789	446	799	799	279	460	0	0	280	0	0
Stage 1	487	487	-	296	296	-	-	-	-	-	-	-
Stage 2	309	302	-	503	503	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	305	323	612	304	319	760	1101	-	-	1283	-	-
Stage 1	562	550	-	712	668	-	-	-	-	-	-	-
Stage 2	701	664	-	551	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	269	304	608	268	300	740	1098	-	-	1276	-	-
Mov Cap-2 Maneuver	269	304	-	268	300	-	-	-	-	-	-	-
Stage 1	553	536	-	689	646	-	-	-	-	-	-	-
Stage 2	637	642	-	506	527	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	12	0.3	0.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1098	-	-	319	572	1276	-	-
HCM Lane V/C Ratio	0.01	-	-	0.17	0.095	0.017	-	-
HCM Control Delay (s)	8.3	0	-	18.6	12	7.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	180	30	20	110	40	10	70	20	80	130	40
Future Vol, veh/h	60	180	30	20	110	40	10	70	20	80	130	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	196	33	22	120	43	11	76	22	87	141	43
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	10.4	9.8	12.1
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	22%	12%	32%
Vol Thru, %	70%	67%	65%	52%
Vol Right, %	20%	11%	24%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	270	170	250
LT Vol	10	60	20	80
Through Vol	70	180	110	130
RT Vol	20	30	40	40
Lane Flow Rate	109	293	185	272
Geometry Grp	1	1	1	1
Degree of Util (X)	0.169	0.43	0.274	0.406
Departure Headway (Hd)	5.591	5.269	5.345	5.373
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	640	684	671	668
Service Time	3.64	3.307	3.389	3.412
HCM Lane V/C Ratio	0.17	0.428	0.276	0.407
HCM Control Delay	9.8	12.2	10.4	12.1
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	2.2	1.1	2

Intersection	
Intersection Delay, s/veh	17.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	240	10	20	150	70	10	110	10	110	230	30
Future Vol, veh/h	40	240	10	20	150	70	10	110	10	110	230	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	261	11	22	163	76	11	120	11	120	250	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.6	14.3	12.1	21.1
HCM LOS	C	B	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	14%	8%	30%
Vol Thru, %	85%	83%	62%	62%
Vol Right, %	8%	3%	29%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	290	240	370
LT Vol	10	40	20	110
Through Vol	110	240	150	230
RT Vol	10	10	70	30
Lane Flow Rate	141	315	261	402
Geometry Grp	1	1	1	1
Degree of Util (X)	0.261	0.547	0.45	0.679
Departure Headway (Hd)	6.646	6.248	6.212	6.076
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	538	577	579	595
Service Time	4.708	4.298	4.266	4.122
HCM Lane V/C Ratio	0.262	0.546	0.451	0.676
HCM Control Delay	12.1	16.6	14.3	21.1
HCM Lane LOS	B	C	B	C
HCM 95th-tile Q	1	3.3	2.3	5.2

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	40	20	80	20	240	20	630	570	370	550	60
Future Volume (veh/h)	30	40	20	80	20	240	20	630	570	370	550	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	33	43	22	87	22	261	22	685	620	402	598	65
Adj No. of Lanes	0	1	0	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	139	71	188	197	546	75	699	585	400	1797	195
Arrive On Green	0.17	0.17	0.17	0.11	0.11	0.11	0.04	0.38	0.38	0.23	0.56	0.56
Sat Flow, veh/h	617	805	412	1774	1863	1647	1774	1863	1560	1774	3216	349
Grp Volume(v), veh/h	98	0	0	87	22	261	22	685	620	402	328	335
Grp Sat Flow(s),veh/h/ln	1834	0	0	1774	1863	1647	1774	1863	1560	1774	1770	1796
Q Serve(g_s), s	7.0	0.0	0.0	6.9	1.6	0.0	1.8	54.5	56.3	33.8	15.1	15.2
Cycle Q Clear(g_c), s	7.0	0.0	0.0	6.9	1.6	0.0	1.8	54.5	56.3	33.8	15.1	15.2
Prop In Lane	0.34		0.22	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	318	0	0	188	197	546	75	699	585	400	989	1003
V/C Ratio(X)	0.31	0.00	0.00	0.46	0.11	0.48	0.30	0.98	1.06	1.01	0.33	0.33
Avail Cap(c_a), veh/h	318	0	0	188	197	546	75	699	585	400	989	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	0.35	0.35	0.35	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	63.0	60.7	39.8	69.7	46.3	46.9	58.1	17.9	18.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	8.0	1.1	3.0	0.3	16.0	39.7	46.4	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	3.8	0.9	9.1	0.9	31.1	30.7	21.7	7.6	7.8
LnGrp Delay(d),s/veh	56.7	0.0	0.0	71.0	61.8	42.8	70.0	62.3	86.5	104.5	18.8	18.8
LnGrp LOS	E			E	E	D	E	E	F	F	B	B
Approach Vol, veh/h		98			370			1327			1065	
Approach Delay, s/veh		56.7			50.6			73.7			51.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.0	60.9		30.6	10.5	88.4		20.5
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	33.8	* 56		26.0	6.3	* 84		15.9
Max Q Clear Time (g_c+I1), s	35.8	58.3		9.0	3.8	17.2		8.9
Green Ext Time (p_c), s	0.0	0.0		0.2	0.3	1.4		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	61.8
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
1: Massachusetts Avenue & Lemon Grove Plaza/94 EB Ramps

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	90	80	130	60	420	30	610	600	370	780	120
Future Volume (veh/h)	100	90	80	130	60	420	30	610	600	370	780	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1863	1863	1937	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	109	98	87	141	65	457	33	663	652	402	848	130
Adj No. of Lanes	0	1	0	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	105	93	188	197	560	85	683	572	415	1697	260
Arrive On Green	0.17	0.17	0.17	0.11	0.11	0.11	0.05	0.37	0.37	0.23	0.55	0.55
Sat Flow, veh/h	671	603	535	1774	1863	1647	1774	1863	1560	1774	3071	471
Grp Volume(v), veh/h	294	0	0	141	65	457	33	663	652	402	489	489
Grp Sat Flow(s),veh/h/ln	1809	0	0	1774	1863	1647	1774	1863	1560	1774	1770	1772
Q Serve(g_s), s	24.1	0.0	0.0	11.6	4.8	2.9	2.7	52.5	55.0	33.7	25.6	25.6
Cycle Q Clear(g_c), s	24.1	0.0	0.0	11.6	4.8	2.9	2.7	52.5	55.0	33.7	25.6	25.6
Prop In Lane	0.37		0.30	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	314	0	0	188	197	560	85	683	572	415	978	979
V/C Ratio(X)	0.94	0.00	0.00	0.75	0.33	0.82	0.39	0.97	1.14	0.97	0.50	0.50
Avail Cap(c_a), veh/h	314	0	0	188	197	560	85	683	572	415	978	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	0.40	0.40	0.40	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	0.0	0.0	65.1	62.1	45.2	69.3	46.7	47.5	56.9	20.7	20.7
Incr Delay (d2), s/veh	37.1	0.0	0.0	23.7	4.4	12.4	0.4	15.9	72.1	35.7	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	0.0	6.9	2.7	3.2	1.3	29.9	35.1	20.6	13.0	13.0
LnGrp Delay(d),s/veh	98.3	0.0	0.0	88.8	66.5	57.6	69.7	62.6	119.6	92.6	22.6	22.6
LnGrp LOS	F			F	E	E	E	E	F	F	C	C
Approach Vol, veh/h		294			663			1348			1380	
Approach Delay, s/veh		98.3			65.1			90.4			42.9	
Approach LOS		F			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.3	59.6		30.6	11.4	87.5		20.5
Change Period (Y+Rc), s	4.2	* 4.6		4.6	4.2	* 4.6		4.6
Max Green Setting (Gmax), s	35.1	* 55		26.0	7.2	* 83		15.9
Max Q Clear Time (g_c+I1), s	35.7	57.0		26.1	4.7	27.6		13.6
Green Ext Time (p_c), s	0.0	0.0		0.0	0.3	2.3		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	68.7
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
15: Grove Street & Lemon Grove Way

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	70	10	40	200	70	380	250	20	40	160	40
Future Volume (veh/h)	120	70	10	40	200	70	380	250	20	40	160	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	130	76	11	43	217	76	413	272	22	43	174	43
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	186	21	140	346	112	712	969	822	218	782	822
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	768	672	77	134	1251	405	1158	1863	1580	208	1503	1580
Grp Volume(v), veh/h	217	0	0	336	0	0	413	272	22	217	0	43
Grp Sat Flow(s),veh/h/ln	1517	0	0	1790	0	0	1158	1863	1580	1712	0	1580
Q Serve(g_s), s	0.0	0.0	0.0	2.1	0.0	0.0	11.8	3.2	0.3	0.0	0.0	0.5
Cycle Q Clear(g_c), s	4.2	0.0	0.0	6.5	0.0	0.0	14.3	3.2	0.3	2.5	0.0	0.5
Prop In Lane	0.60		0.05	0.13		0.23	1.00		1.00	0.20		1.00
Lane Grp Cap(c), veh/h	566	0	0	598	0	0	712	969	822	1000	0	822
V/C Ratio(X)	0.38	0.00	0.00	0.56	0.00	0.00	0.58	0.28	0.03	0.22	0.00	0.05
Avail Cap(c_a), veh/h	876	0	0	1005	0	0	1052	1516	1286	1478	0	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	12.6	0.0	0.0	9.0	5.3	4.6	5.1	0.0	4.7
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.8	0.0	0.0	0.8	0.2	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	3.3	0.0	0.0	3.8	1.6	0.1	1.3	0.0	0.2
LnGrp Delay(d),s/veh	12.2	0.0	0.0	13.4	0.0	0.0	9.8	5.5	4.6	5.2	0.0	4.7
LnGrp LOS	B			B			A	A	A	A		A
Approach Vol, veh/h		217			336			707			260	
Approach Delay, s/veh		12.2			13.4			8.0			5.1	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		14.9		24.5		14.9		24.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		32.0		20.0		32.0
Max Q Clear Time (g_c+I1), s		6.2		4.5		8.5		16.3
Green Ext Time (p_c), s		2.2		4.8		2.0		4.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.3
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
15: Grove Street & Lemon Grove Way

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	90	20	20	110	20	200	170	40	20	410	60
Future Volume (veh/h)	70	90	20	20	110	20	200	170	40	20	410	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	76	98	22	22	120	22	217	185	43	22	446	65
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	210	40	151	301	51	571	1026	870	130	999	870
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	501	1005	190	133	1443	244	885	1863	1580	30	1814	1580
Grp Volume(v), veh/h	196	0	0	164	0	0	217	185	43	468	0	65
Grp Sat Flow(s),veh/h/ln	1697	0	0	1820	0	0	885	1863	1580	1844	0	1580
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	6.5	1.6	0.4	0.0	0.0	0.6
Cycle Q Clear(g_c), s	3.1	0.0	0.0	2.5	0.0	0.0	11.5	1.6	0.4	5.0	0.0	0.6
Prop In Lane	0.39		0.11	0.13		0.13	1.00		1.00	0.05		1.00
Lane Grp Cap(c), veh/h	504	0	0	502	0	0	571	1026	870	1129	0	870
V/C Ratio(X)	0.39	0.00	0.00	0.33	0.00	0.00	0.38	0.18	0.05	0.41	0.00	0.07
Avail Cap(c_a), veh/h	985	0	0	1040	0	0	1016	1964	1666	2040	0	1666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	0.0	11.4	0.0	0.0	7.9	3.7	3.4	4.5	0.0	3.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.4	0.1	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	1.3	0.0	0.0	1.6	0.8	0.2	2.5	0.0	0.3
LnGrp Delay(d),s/veh	12.1	0.0	0.0	11.8	0.0	0.0	8.3	3.8	3.5	4.7	0.0	3.5
LnGrp LOS	B			B			A	A	A	A		A
Approach Vol, veh/h		196			164			445			533	
Approach Delay, s/veh		12.1			11.8			6.0			4.6	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		10.9		22.3		10.9		22.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0		35.0		17.0		35.0
Max Q Clear Time (g_c+I1), s		5.1		7.0		4.5		13.5
Green Ext Time (p_c), s		1.2		5.1		1.2		4.8

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
16: Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	540	0	0	0	0	890	700	250	760	0
Future Volume (veh/h)	30	0	540	0	0	0	0	890	700	250	760	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1863	1900	1863	0
Adj Flow Rate, veh/h	33	0	587				0	967	761	272	826	0
Adj No. of Lanes	0	1	2				0	2	1	0	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	437	0	687				0	2182	976	255	993	0
Arrive On Green	0.25	0.00	0.25				0.00	0.62	0.62	0.62	0.62	0.00
Sat Flow, veh/h	1774	0	2787				0	3632	1583	214	1695	0
Grp Volume(v), veh/h	33	0	587				0	967	761	272	826	0
Grp Sat Flow(s),veh/h/ln	1774	0	1393				0	1770	1583	214	1610	0
Q Serve(g_s), s	0.8	0.0	11.7				0.0	8.4	20.7	27.6	23.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	11.7				0.0	8.4	20.7	36.0	23.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	437	0	687				0	2182	976	255	993	0
V/C Ratio(X)	0.08	0.00	0.85				0.00	0.44	0.78	1.07	0.83	0.00
Avail Cap(c_a), veh/h	486	0	764				0	2182	976	255	993	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.9	0.0	21.0				0.0	5.9	8.3	22.1	8.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.7				0.0	0.1	4.1	74.6	6.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	5.3				0.0	4.1	10.0	9.3	11.8	0.0
LnGrp Delay(d),s/veh	17.0	0.0	29.7				0.0	6.1	12.4	96.7	14.9	0.0
LnGrp LOS	B		C					A	B	F	B	
Approach Vol, veh/h		620						1728			1098	
Approach Delay, s/veh		29.0						8.8			35.2	
Approach LOS		C						A			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		40.0		18.4		40.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		36.0		16.0		36.0		
Max Q Clear Time (g_c+I1), s		22.7		13.7		38.0		
Green Ext Time (p_c), s		12.5		0.7		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
16: Lemon Grove Avenue & SR-94 EB Off-Ramp/SR-94 EB On-Ramp

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	1050	0	0	0	0	740	390	160	1040	0
Future Volume (veh/h)	110	0	1050	0	0	0	0	740	390	160	1040	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1863	1900	1863	0
Adj Flow Rate, veh/h	120	0	1141				0	804	424	174	1130	0
Adj No. of Lanes	0	1	2				0	2	1	0	2	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	0	966				0	1935	866	192	1187	0
Arrive On Green	0.35	0.00	0.35				0.00	0.55	0.55	0.55	0.55	0.00
Sat Flow, veh/h	1774	0	2787				0	3632	1583	233	2256	0
Grp Volume(v), veh/h	120	0	1141				0	804	424	510	794	0
Grp Sat Flow(s),veh/h/ln	1774	0	1393				0	1770	1583	793	1610	0
Q Serve(g_s), s	3.6	0.0	26.0				0.0	10.0	12.4	31.0	33.1	0.0
Cycle Q Clear(g_c), s	3.6	0.0	26.0				0.0	10.0	12.4	41.0	33.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.34		0.00
Lane Grp Cap(c), veh/h	615	0	966				0	1935	866	498	880	0
V/C Ratio(X)	0.20	0.00	1.18				0.00	0.42	0.49	1.02	0.90	0.00
Avail Cap(c_a), veh/h	615	0	966				0	1935	866	498	880	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	24.5				0.0	10.0	10.5	21.0	15.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	92.2				0.0	0.1	0.4	46.3	12.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	22.3				0.0	4.8	5.5	16.6	17.6	0.0
LnGrp Delay(d),s/veh	17.3	0.0	116.7				0.0	10.1	11.0	67.3	27.7	0.0
LnGrp LOS	B		F					B	B	F	C	
Approach Vol, veh/h		1261						1228			1304	
Approach Delay, s/veh		107.3						10.4			43.2	
Approach LOS		F						B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		45.0		30.0		45.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		41.0		26.0		41.0		
Max Q Clear Time (g_c+I1), s		14.4		28.0		43.0		
Green Ext Time (p_c), s		21.1		0.0		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary
17: Lemon Grove Avenue/Lemon Grove Way & North Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	40	580	10	70	0	870	80	10	0	20	500
Future Volume (veh/h)	110	40	580	10	70	0	870	80	10	0	20	500
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	120	43	630	11	76	0	946	87	11	0	22	543
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	139	815	15	102	0	994	860	109	0	331	745
Arrive On Green	0.29	0.29	0.29	0.06	0.06	0.00	0.29	0.51	0.51	0.00	0.18	0.18
Sat Flow, veh/h	1323	474	2787	234	1617	0	3442	1682	213	0	1863	1583
Grp Volume(v), veh/h	163	0	630	87	0	0	946	0	98	0	22	543
Grp Sat Flow(s),veh/h/ln	1797	0	1393	1851	0	0	1721	0	1894	0	1863	1583
Q Serve(g_s), s	6.4	0.0	18.6	4.2	0.0	0.0	24.3	0.0	2.4	0.0	0.9	16.0
Cycle Q Clear(g_c), s	6.4	0.0	18.6	4.2	0.0	0.0	24.3	0.0	2.4	0.0	0.9	16.0
Prop In Lane	0.74		1.00	0.13		0.00	1.00		0.11	0.00		1.00
Lane Grp Cap(c), veh/h	526	0	815	117	0	0	994	0	968	0	331	745
V/C Ratio(X)	0.31	0.00	0.77	0.75	0.00	0.00	0.95	0.00	0.10	0.00	0.07	0.73
Avail Cap(c_a), veh/h	526	0	815	329	0	0	994	0	968	0	331	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.30	0.00	0.30	0.00	0.71	0.71
Uniform Delay (d), s/veh	24.8	0.0	29.1	41.5	0.0	0.0	31.4	0.0	11.3	0.0	30.8	16.9
Incr Delay (d2), s/veh	1.5	0.0	7.0	9.1	0.0	0.0	7.4	0.0	0.0	0.0	0.1	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	7.9	2.4	0.0	0.0	12.5	0.0	1.3	0.0	0.5	14.0
LnGrp Delay(d),s/veh	26.3	0.0	36.1	50.6	0.0	0.0	38.8	0.0	11.4	0.0	30.8	19.5
LnGrp LOS	C		D	D			D		B		C	B
Approach Vol, veh/h		793			87			1044			565	
Approach Delay, s/veh		34.1			50.6			36.2			19.9	
Approach LOS		C			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		30.3	30.0	20.0		9.7		50.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		16.0	26.0	16.0		16.0		46.0
Max Q Clear Time (g_c+I1), s		20.6	26.3	18.0		6.2		4.4
Green Ext Time (p_c), s		0.0	0.0	0.0		0.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.3
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
17: Lemon Grove Avenue/Lemon Grove Way & North Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	80	970	10	30	0	710	60	10	0	40	270
Future Volume (veh/h)	160	80	970	10	30	0	710	60	10	0	40	270
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1937	1900	1900	1863	1863
Adj Flow Rate, veh/h	174	87	1054	11	33	0	772	65	11	0	43	293
Adj No. of Lanes	0	1	2	0	1	0	2	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	495	247	1147	14	43	0	847	682	115	0	248	863
Arrive On Green	0.69	0.69	0.69	0.03	0.03	0.00	0.25	0.42	0.42	0.00	0.13	0.13
Sat Flow, veh/h	1202	601	2787	460	1380	0	3442	1610	272	0	1863	1583
Grp Volume(v), veh/h	261	0	1054	44	0	0	772	0	76	0	43	293
Grp Sat Flow(s),veh/h/ln	1803	0	1393	1840	0	0	1721	0	1882	0	1863	1583
Q Serve(g_s), s	5.4	0.0	28.9	2.1	0.0	0.0	19.6	0.0	2.2	0.0	1.8	9.3
Cycle Q Clear(g_c), s	5.4	0.0	28.9	2.1	0.0	0.0	19.6	0.0	2.2	0.0	1.8	9.3
Prop In Lane	0.67		1.00	0.25		0.00	1.00		0.14	0.00		1.00
Lane Grp Cap(c), veh/h	742	0	1147	58	0	0	847	0	797	0	248	863
V/C Ratio(X)	0.35	0.00	0.92	0.76	0.00	0.00	0.91	0.00	0.10	0.00	0.17	0.34
Avail Cap(c_a), veh/h	742	0	1147	327	0	0	880	0	899	0	331	933
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.74	0.00	0.74	0.00	0.91	0.91
Uniform Delay (d), s/veh	9.1	0.0	12.8	43.3	0.0	0.0	33.0	0.0	15.6	0.0	34.6	11.4
Incr Delay (d2), s/veh	1.3	0.0	13.1	18.4	0.0	0.0	10.4	0.0	0.0	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	12.8	1.4	0.0	0.0	10.6	0.0	1.1	0.0	1.0	7.3
LnGrp Delay(d),s/veh	10.4	0.0	25.9	61.7	0.0	0.0	43.4	0.0	15.6	0.0	34.9	11.7
LnGrp LOS	B		C	E			D		B		C	B
Approach Vol, veh/h		1315			44			848			336	
Approach Delay, s/veh		22.8			61.7			40.9			14.6	
Approach LOS		C			E			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		41.1	26.1	16.0		6.8		42.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		19.0	23.0	16.0		16.0		43.0
Max Q Clear Time (g_c+I1), s		30.9	21.6	11.3		4.1		4.2
Green Ext Time (p_c), s		0.0	0.5	0.7		0.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

HCM 2010 TWSC
18: Lemon Grove Avenue & Golden Avenue

03/15/2018

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	170	1050	40	60	500
Future Vol, veh/h	0	170	1050	40	60	500
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	185	1141	43	65	543

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1601	628	0	0	1221	0
Stage 1	1199	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	97	426	-	-	567	-
Stage 1	248	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	78	409	-	-	567	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	238	-	-	-	-	-
Stage 2	538	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	409	567	-
HCM Lane V/C Ratio	-	-	0.452	0.115	-
HCM Control Delay (s)	-	-	20.9	12.2	0.8
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	2.3	0.4	-

HCM 2010 TWSC
18: Lemon Grove Avenue & Golden Avenue

03/15/2018

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	100	800	40	50	930
Future Vol, veh/h	0	100	800	40	50	930
Conflicting Peds, #/hr	0	0	0	36	36	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	109	870	43	54	1011

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1541	493	0	0	949	0
Stage 1	927	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	106	522	-	-	719	-
Stage 1	346	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	84	501	-	-	719	-
Mov Cap-2 Maneuver	84	-	-	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	416	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	501	719	-
HCM Lane V/C Ratio	-	-	0.217	0.076	-
HCM Control Delay (s)	-	-	14.2	10.4	0.8
HCM Lane LOS	-	-	B	B	A
HCM 95th %tile Q(veh)	-	-	0.8	0.2	-

HCM 2010 TWSC
20: Lemon Grove Avenue & Lincoln Street

03/15/2018

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	210	1100	140	140	450
Future Vol, veh/h	0	210	1100	140	140	450
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	228	1196	152	152	489

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1832	685	0	0	1359	0
Stage 1	1283	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	68	391	-	-	502	-
Stage 1	224	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	47	386	-	-	502	-
Mov Cap-2 Maneuver	47	-	-	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	3.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	386	502	-
HCM Lane V/C Ratio	-	-	0.591	0.303	-
HCM Control Delay (s)	-	-	27	15.3	-
HCM Lane LOS	-	-	D	C	-
HCM 95th %tile Q(veh)	-	-	3.7	1.3	-

HCM 2010 TWSC
20: Lemon Grove Avenue & Lincoln Street

03/15/2018

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	80	800	40	100	1070
Future Vol, veh/h	0	80	800	40	100	1070
Conflicting Peds, #/hr	0	0	0	11	11	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	70	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	87	870	43	109	1163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1701	468	0	0	924	0
Stage 1	902	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	83	542	-	-	735	-
Stage 1	356	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	535	-	-	735	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	352	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	535	735	-
HCM Lane V/C Ratio	-	-	0.163	0.148	-
HCM Control Delay (s)	-	-	13	10.7	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	-

HCM 2010 Signalized Intersection Summary
21: Kempf Street & Golden Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	50	120	0	60	90	120	850	10	40	330	170
Future Volume (veh/h)	160	50	120	0	60	90	120	850	10	40	330	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1788	1863	1863	1937
Adj Flow Rate, veh/h	174	54	130	0	65	98	130	924	11	43	359	185
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	65	117	0	190	287	544	1096	873	233	1096	945
Arrive On Green	0.27	0.27	0.27	0.00	0.27	0.27	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	511	236	426	0	693	1044	858	1863	1485	596	1863	1608
Grp Volume(v), veh/h	358	0	0	0	0	163	130	924	11	43	359	185
Grp Sat Flow(s),veh/h/ln	1173	0	0	0	0	1737	858	1863	1485	596	1863	1608
Q Serve(g_s), s	11.6	0.0	0.0	0.0	0.0	4.4	5.3	23.6	0.2	3.7	5.7	3.1
Cycle Q Clear(g_c), s	16.0	0.0	0.0	0.0	0.0	4.4	11.0	23.6	0.2	27.3	5.7	3.1
Prop In Lane	0.49		0.36	0.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	0	0	0	477	544	1096	873	233	1096	945
V/C Ratio(X)	0.87	0.00	0.00	0.00	0.00	0.34	0.24	0.84	0.01	0.18	0.33	0.20
Avail Cap(c_a), veh/h	414	0	0	0	0	477	569	1151	917	250	1151	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	0.0	0.0	0.0	16.9	8.9	9.8	5.0	21.0	6.1	5.6
Incr Delay (d2), s/veh	17.1	0.0	0.0	0.0	0.0	0.4	0.2	5.7	0.0	0.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	0.0	0.0	0.0	2.1	1.3	13.5	0.1	0.6	2.9	1.4
LnGrp Delay(d),s/veh	40.1	0.0	0.0	0.0	0.0	17.3	9.2	15.5	5.0	21.4	6.3	5.7
LnGrp LOS	D					B	A	B	A	C	A	A
Approach Vol, veh/h		358			163			1065			587	
Approach Delay, s/veh		40.1			17.3			14.6			7.2	
Approach LOS		D			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.3		20.0		38.3		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		16.0		36.0		16.0
Max Q Clear Time (g_c+I1), s		25.6		18.0		29.3		6.4
Green Ext Time (p_c), s		7.1		0.0		5.0		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
21: Kempf Street & Golden Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	20	110	0	10	40	80	400	10	70	750	140
Future Volume (veh/h)	210	20	110	0	10	40	80	400	10	70	750	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1863	1788	1863	1863	1937
Adj Flow Rate, veh/h	228	22	120	0	11	43	87	435	11	76	815	152
Adj No. of Lanes	0	1	0	0	1	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	33	135	0	101	395	257	1056	842	533	1056	911
Arrive On Green	0.30	0.30	0.30	0.00	0.30	0.30	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	838	112	456	0	343	1339	579	1863	1485	939	1863	1607
Grp Volume(v), veh/h	370	0	0	0	0	54	87	435	11	76	815	152
Grp Sat Flow(s),veh/h/ln	1406	0	0	0	0	1682	579	1863	1485	939	1863	1607
Q Serve(g_s), s	13.4	0.0	0.0	0.0	0.0	1.4	7.9	7.6	0.2	2.9	19.5	2.6
Cycle Q Clear(g_c), s	14.8	0.0	0.0	0.0	0.0	1.4	27.4	7.6	0.2	10.5	19.5	2.6
Prop In Lane	0.62		0.32	0.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	0	0	0	0	496	257	1056	842	533	1056	911
V/C Ratio(X)	0.72	0.00	0.00	0.00	0.00	0.11	0.34	0.41	0.01	0.14	0.77	0.17
Avail Cap(c_a), veh/h	538	0	0	0	0	522	269	1093	871	551	1093	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	0.0	0.0	0.0	14.9	20.2	7.1	5.5	10.1	9.7	6.0
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.0	0.0	0.1	0.8	0.3	0.0	0.1	3.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	0.0	0.0	0.6	1.3	3.9	0.1	0.8	10.9	1.2
LnGrp Delay(d),s/veh	24.4	0.0	0.0	0.0	0.0	15.0	21.0	7.3	5.5	10.2	13.0	6.1
LnGrp LOS	C					B	C	A	A	B	B	A
Approach Vol, veh/h		370			54			533			1043	
Approach Delay, s/veh		24.4			15.0			9.5			11.8	
Approach LOS		C			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.9		21.1		36.9		21.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		34.0		18.0		34.0		18.0
Max Q Clear Time (g_c+I1), s		29.4		16.8		21.5		3.4
Green Ext Time (p_c), s		3.4		0.4		7.8		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
23: Skyline Drive/Kempf Street & Lincoln Street

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	40	90	10	110	30	280	710	10	20	230	90
Future Volume (veh/h)	20	40	90	10	110	30	280	710	10	20	230	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.92	0.96		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1937	1937	1900
Adj Flow Rate, veh/h	22	43	98	11	120	33	304	772	11	22	250	98
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	115	210	103	302	79	680	1128	16	397	778	305
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	111	531	968	51	1395	364	1024	1904	27	715	1313	515
Grp Volume(v), veh/h	163	0	0	164	0	0	304	0	783	22	0	348
Grp Sat Flow(s),veh/h/ln	1610	0	0	1810	0	0	1024	0	1931	715	0	1828
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.0	11.6	0.9	0.0	4.0
Cycle Q Clear(g_c), s	3.6	0.0	0.0	3.2	0.0	0.0	12.9	0.0	11.6	12.6	0.0	4.0
Prop In Lane	0.13		0.60	0.07		0.20	1.00		0.01	1.00		0.28
Lane Grp Cap(c), veh/h	446	0	0	484	0	0	680	0	1144	397	0	1083
V/C Ratio(X)	0.37	0.00	0.00	0.34	0.00	0.00	0.45	0.00	0.68	0.06	0.00	0.32
Avail Cap(c_a), veh/h	705	0	0	777	0	0	954	0	1660	587	0	1571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	14.1	0.0	0.0	7.5	0.0	5.9	10.2	0.0	4.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.7	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.7	0.0	0.0	2.5	0.0	6.3	0.2	0.0	2.0
LnGrp Delay(d),s/veh	14.8	0.0	0.0	14.5	0.0	0.0	8.0	0.0	6.6	10.2	0.0	4.5
LnGrp LOS	B			B			A		A	B		A
Approach Vol, veh/h		163			164			1087			370	
Approach Delay, s/veh		14.8			14.5			7.0			4.8	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.8		13.1		28.8		13.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		16.0		36.0		16.0
Max Q Clear Time (g_c+I1), s		14.9		5.6		14.6		5.2
Green Ext Time (p_c), s		9.9		1.5		10.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
23: Skyline Drive/Kempf Street & Lincoln Street

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	180	10	30	10	90	300	10	20	570	40
Future Volume (veh/h)	40	70	180	10	30	10	90	300	10	20	570	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	0.98		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1863	1937	1900	1937	1937	1900
Adj Flow Rate, veh/h	43	76	196	11	33	11	98	326	11	22	620	43
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	133	278	145	341	97	395	1015	34	644	974	68
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	131	482	1010	174	1241	354	768	1861	63	1075	1787	124
Grp Volume(v), veh/h	315	0	0	55	0	0	98	0	337	22	0	663
Grp Sat Flow(s),veh/h/ln	1623	0	0	1769	0	0	768	0	1924	1075	0	1911
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.3	0.5	0.0	10.8
Cycle Q Clear(g_c), s	7.7	0.0	0.0	1.0	0.0	0.0	15.3	0.0	4.3	4.8	0.0	10.8
Prop In Lane	0.14		0.62	0.20		0.20	1.00		0.03	1.00		0.06
Lane Grp Cap(c), veh/h	538	0	0	584	0	0	395	0	1049	644	0	1042
V/C Ratio(X)	0.59	0.00	0.00	0.09	0.00	0.00	0.25	0.00	0.32	0.03	0.00	0.64
Avail Cap(c_a), veh/h	708	0	0	756	0	0	580	0	1512	903	0	1502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	0.0	0.0	12.1	0.0	0.0	12.4	0.0	5.6	6.9	0.0	7.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	0.5	0.0	0.0	1.0	0.0	2.3	0.2	0.0	5.7
LnGrp Delay(d),s/veh	15.5	0.0	0.0	12.1	0.0	0.0	12.7	0.0	5.8	6.9	0.0	7.7
LnGrp LOS	B			B			B		A	A		A
Approach Vol, veh/h		315			55			435			685	
Approach Delay, s/veh		15.5			12.1			7.3			7.7	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.3		16.2		28.3		16.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		35.0		17.0		35.0		17.0
Max Q Clear Time (g_c+I1), s		17.3		9.7		12.8		3.0
Green Ext Time (p_c), s		7.0		1.4		7.7		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
27: Buena Vista Avenue & Central Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	240	10	30	350	180	20	270	60	90	130	30
Future Volume (veh/h)	30	240	10	30	350	180	20	270	60	90	130	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1900	1937	1900	1900	1863	1900
Adj Flow Rate, veh/h	33	261	11	33	380	196	22	293	65	98	141	33
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	790	31	118	554	273	113	477	102	262	326	64
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	87	1670	66	45	1170	577	48	1482	316	424	1011	198
Grp Volume(v), veh/h	305	0	0	609	0	0	380	0	0	272	0	0
Grp Sat Flow(s),veh/h/ln	1822	0	0	1791	0	0	1845	0	0	1633	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	0.0	10.4	0.0	0.0	6.7	0.0	0.0	4.6	0.0	0.0
Prop In Lane	0.11		0.04	0.05		0.32	0.06		0.17	0.36		0.12
Lane Grp Cap(c), veh/h	964	0	0	945	0	0	692	0	0	651	0	0
V/C Ratio(X)	0.32	0.00	0.00	0.64	0.00	0.00	0.55	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	1465	0	0	1464	0	0	1130	0	0	992	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	8.1	0.0	0.0	11.3	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	5.3	0.0	0.0	3.6	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	6.6	0.0	0.0	8.9	0.0	0.0	11.9	0.0	0.0	11.0	0.0	0.0
LnGrp LOS	A			A			B			B		
Approach Vol, veh/h		305			609			380			272	
Approach Delay, s/veh		6.6			8.9			11.9			11.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.6		22.5		16.6		22.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		22.0		30.0		22.0		30.0
Max Q Clear Time (g_c+I1), s		8.7		5.9		6.6		12.4
Green Ext Time (p_c), s		3.7		6.9		4.0		6.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
27: Buena Vista Avenue & Central Avenue

03/15/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	240	10	20	150	70	10	110	10	110	230	30
Future Volume (veh/h)	40	240	10	20	150	70	10	110	10	110	230	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1900	1900	1937	1900	1900	1937	1900	1900	1863	1900
Adj Flow Rate, veh/h	43	261	11	22	163	76	11	120	11	120	250	33
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	549	21	157	402	174	152	653	56	299	455	53
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	135	1633	64	67	1197	519	49	1679	145	357	1171	136
Grp Volume(v), veh/h	315	0	0	261	0	0	142	0	0	403	0	0
Grp Sat Flow(s),veh/h/ln	1832	0	0	1782	0	0	1873	0	0	1664	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	3.2	0.0	0.0	1.4	0.0	0.0	5.4	0.0	0.0
Prop In Lane	0.14		0.03	0.08		0.29	0.08		0.08	0.30		0.08
Lane Grp Cap(c), veh/h	756	0	0	733	0	0	862	0	0	808	0	0
V/C Ratio(X)	0.42	0.00	0.00	0.36	0.00	0.00	0.16	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1376	0	0	1341	0	0	2148	0	0	1949	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	7.5	0.0	0.0	5.9	0.0	0.0	7.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	1.7	0.0	0.0	0.8	0.0	0.0	2.6	0.0	0.0
LnGrp Delay(d),s/veh	8.0	0.0	0.0	7.8	0.0	0.0	6.0	0.0	0.0	7.5	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h		315			261			142			403	
Approach Delay, s/veh		8.0			7.8			6.0			7.5	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.3		13.8		15.3		13.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		20.0		32.0		20.0
Max Q Clear Time (g_c+I1), s		3.4		5.8		7.4		5.2
Green Ext Time (p_c), s		4.0		3.1		3.8		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	7.5
HCM 2010 LOS	A

Arterial Level of Service: EB Central Avenue

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Massachusetts Avenue	III	35	30.0	25.5	55.5	0.25	16.2	D
Buena Vista Avenue	III	30	17.6	9.4	27.0	0.12	16.6	D
Total	III		47.6	34.9	82.5	0.37	16.3	D

Arterial Level of Service: WB Central Avenue

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Buena Vista Avenue	III	30	14.6	14.0	28.6	0.10	13.0	E
Massachusetts Avenue	III	30	47.6	37.2	84.8	0.37	15.9	D
Total	III		62.2	51.2	113.4	0.48	15.2	D

Arterial Level of Service

03/15/2018

Arterial Level of Service: EB Central Avenue

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Massachusetts Avenue	III	35	30.0	27.8	57.8	0.25	15.6	D
Buena Vista Avenue	III	30	17.6	14.5	32.1	0.12	14.0	E
Total	III		47.6	42.3	89.9	0.37	15.0	D

Arterial Level of Service: WB Central Avenue

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Buena Vista Avenue	III	30	14.6	11.6	26.2	0.10	14.2	D
Massachusetts Avenue	III	30	47.6	26.4	74.0	0.37	18.2	C
Total	III		62.2	38.0	100.2	0.48	17.2	D

APPENDIX E

SANTEC / ITE GUIDELINES FOR TRAFFIC IMPACT STUDIES (TIS) IN THE SAN DIEGO REGION

SANTEC / ITE
GUIDELINES FOR TRAFFIC IMPACT STUDIES [TIS] IN THE SAN DIEGO REGION

MARCH 2, 2000 FINAL DRAFT

PREFACE

These guidelines are subject to continual update, as future technology and documentation become available. Always check with local jurisdictions for their preferred or applicable procedures.

Committee Compilation by Kent A. Whitson

Reviewed by committee members: Hank Morris (co-chair), Tom Parry (co-chair), Arnold Torma (co-chair), Susan O'Rourke, Bill Darnell, Labib Qasem, John Boarman, Ralph Leyva, and Erik Ruehr

Additional review by: Ann French Gonsalves, Bill Figge, Bob Goralka, and Gary Halbert

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SANTEC / ITE GUIDELINES FOR TRAFFIC IMPACT STUDIES [TIS] IN THE SAN DIEGO REGION

SANTEC / ITE GUIDELINES FOR TRAFFIC IMPACT STUDIES [TIS] IN THE SAN DIEGO REGION

I. BACKGROUND

In September 1998, the San Diego Regional Traffic Standards Task Force gathered for the first time to promote "cooperation among the Cities, Caltrans, and the County of San Diego to create a region-wide standard for determining traffic impacts in environmental reports." Ultimately the San Diego Traffic Engineers' Council (SANTEC) and the Institute of Transportation Engineers (ITE – California Border Section) were requested to prepare guidelines for traffic impact studies [TIS] that could be reviewed by the Task Force and other appropriate groups. The primary documents used to help prepare these guidelines were SANDAG's Congestion Management Program and Traffic Generators manual, City of San Diego's Traffic Impact Study Manual and Trip Generation Manual, and Caltrans' Draft Guide for the Preparation of Traffic Impact Studies.

II. PURPOSE OF TRAFFIC IMPACT STUDIES [TIS]

Traffic impact studies forecast, describe, and analyze the traffic and transit effects a development will have on the existing and future circulation infrastructure. The purpose of the TIS is to assist engineers in both the development community and public agencies when making land use and other development decisions. A TIS quantifies the changes in traffic levels and translates these changes into transportation system impacts in the vicinity of a project.

TIS requirements are usually outlined as part of any environmental (CEQA) project review process; and, in order to monitor effects by these requirements, Notices of Preparation must be submitted to all affected agencies.

III. OBJECTIVES OF TIS GUIDELINES

The following guidelines were prepared to assist local agencies throughout the San Diego Region in promoting consistency and uniformity in traffic impact studies. All Circulation/Community Element roadways, all State routes and freeways (including metered and unmetered ramps), and all transit facilities that are impacted should be included in each study.

In general, the region-wide goal for an acceptable level-of-service (LOS) on all freeways, roadway segments, and intersections is "D." For undeveloped or not densely developed locations, as determined by any local jurisdiction, the goal may be to achieve a level-of-service of "C." Individual local jurisdictions, as well as Caltrans, have slightly different

LOS objectives. For example, the Regional Growth Management Strategy for San Diego has a level-of-service objective of "D;" while the Congestion Management Program has established a minimum level-of-service of "E", or "F" if that is the existing 1990 base year LOS. In other words, if the existing LOS is "D" or worse, preservation of the existing LOS must be maintained or acceptable mitigation must be identified.

These guidelines do not establish a legal standard for these functions, but are intended to supplement any individual TIS manuals or level-of-service objectives for the various jurisdictions. These guidelines attempt to consolidate regional efforts to identify when a TIS is needed, what professional procedures should be followed, and what constitutes a significant traffic impact.

The instructions outlined in these guidelines are subject to update as future conditions and experience become available. Special situations may call for variation from these guidelines. Caltrans and lead agencies should agree on the specific methods used in traffic impact studies involving any State Route facilities, including metered and unmetered freeway ramps.

IV. NEED FOR A STUDY

A TIS should be prepared for all projects which generate traffic greater than 1,000 total average daily trips (ADT) or 100 peak-hour trips. If a proposed project is not in conformance with the land use and/or transportation element of the general or community plan, use threshold rates of 500 ADT or 50 peak-hour trips. Early consultation with any affected jurisdictions is strongly encouraged since a "focused" or "abbreviated" TIS may still be required – even if the above threshold rates are not met.

Currently, a Congestion Management Program (CMP) analysis is required for all large projects, which are defined as generating 2,400 or more average daily trips or 200 or more peak-hour trips. This size of study would usually include computerized long-range forecasts and select zone assignments. Please refer to the following flow chart (Figure 1) for TIS requirements.

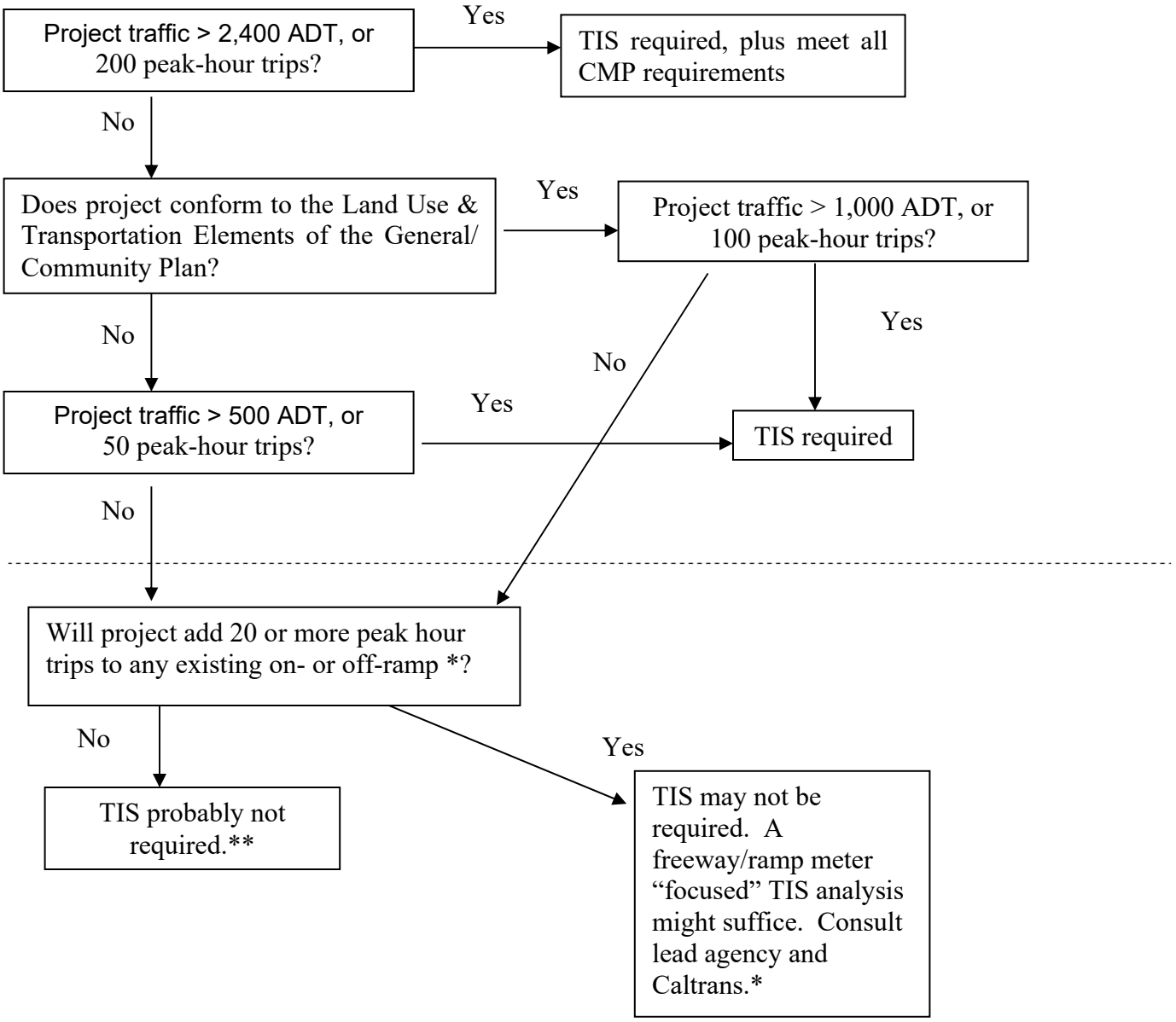
The geographic area examined in the TIS must include the following:

- All local roadway segments (including all State surface routes), intersections, and mainline freeway locations where the proposed project will add 50 or more peak-hour trips in either direction to the existing roadway traffic.

- All freeway entrance and exit ramps where the proposed project will add a significant number of peak-hour trips to cause any traffic queues to exceed ramp storage capacities (see Figure 1). (NOTE: Care must be taken to include <u>other</u> ramps and intersections that may receive project traffic <u>diverted</u> as a result of already existing, or project causing congestion at freeway entrances and exits.)

Figure 1

FLOW CHART FOR TRAFFIC IMPACT STUDY REQUIREMENTS



* Check with Caltrans for current ramp metering rates and ramp storage capacities. (See Attachment B – Ramp Metering Analysis)

** However, for health and safety reasons, and/or local and residential street issues, an "abbreviated" or "focused" TIS may still be requested by a local agency. (For example, this may include traffic backed up beyond an off-ramp's storage capacity, or may include diverted traffic through an existing neighborhood.)

The data used in the TIS should generally not be more than 2 years old, and should not reflect a temporary interruption (special events, construction detour, etc.) in the normal traffic patterns unless that is the nature of the project itself. If recent traffic data is not available, current counts must be made by the project applicant/consultant.

V. PROJECT COORDINATION VIA STAFF CONSULTATION

Early consultation between the development community, local and lead agencies, and Caltrans is strongly recommended to establish the base input parameters, assumptions, and analysis methodologies for the TIS.

It is critical that the TIS preparer discuss the project with the lead reviewing agency's staff engineer/planner at an early stage in the planning process. An understanding of the level of detail and the assumptions required for the analysis should be reached. While a pre-submittal conference is highly encouraged, it may not be a requirement. For straight-forward studies prepared by consultants familiar with these TIS procedures, a telephone call or e-mail, followed by a fax verifying key assumptions, may suffice. Always check with the local jurisdictions for their concerns.

VI. SCENARIOS TO BE STUDIED

After documenting existing conditions, both near-term (within approximately the next five years) and long-term (usually for a 20-year planning horizon or build-out of the area), analyses are needed.

All of the following scenarios should be addressed in the TIS (unless there is concurrence with the lead agency[ies] that one or more of these scenarios may be omitted):

- Existing {roadway infrastructure}
- Existing + Near-term Cumulative Projects {approved and pending}
- Existing + Near-term Cumulative Projects + Proposed Project {each phase when applicable}
- Horizon Year {typically Year 2020 or twenty years in the future}
- Horizon Year + Proposed Project {if different from General/Community Plan}

Scenario definitions:

Existing conditions – Document existing traffic volumes and peak-hour levels of service in the study area. The existing deficiencies and potential mitigation should be identified.

Existing + Near-term – Analyze the cumulative condition impacts from "other" approved and "reasonably foreseeable" pending projects (application on file or definitely in the pipeline) that are expected to influence the study area. This is the baseline against which project impacts are assessed. The lead agency should provide copies of the traffic studies for the "other" projects. If data is not available for near-term cumulative projects, an ambient growth factor should be used.

Existing + Near-term + Proposed Project – Analyze the impacts of the proposed project on top of existing conditions and near-term projects (along with their committed or funded mitigation measures, if any).

Horizon Year – Identify Year 2020 traffic forecasts or 20-year future conditions through the output of a SANDAG model forecast (currently TRANPLAN) or other computer model approved by the local agency. If the proposed project is consistent with the land uses represented in the model, the TIS may only need to use this condition.

Horizon Year + Proposed Project – If the project land uses are more traffic intense than what was assumed in the horizon year model forecasts, analyze the additional project traffic impacts to the horizon year condition. When justified, and particularly in the case of very large developments or new general/community plans, a transportation model should be run with, and without, the additional development to show the net impacts on all parts of the area's transportation system.

In order to use LOS criteria to measure traffic impact significance (see Table 1), proposed model or manual forecast adjustments must be made to address scenarios both with and without the project. Model data should be carefully verified to ensure accurate project and "other" cumulative project representation. In these cases, regional or subregional models conducted by SANDAG need to be reviewed for appropriateness.

Note: Project trips can be assigned and distributed either manually or by the computer model based upon review and approval of the local agency Traffic Engineer. The magnitude of the proposed project will usually determine which method is employed.

If the manual method is used, the trip distribution percentages should be derived from a computer generated "select zone assignment" or optionally (local agency approval) by professional judgement.

If the computer model is used, the centroid connectors should accurately represent project access to the street network. Preferably the project would be represented by its own traffic zone. Some adjustments to the output volumes may be needed (especially at intersections) to smooth out volumes, quantify peak volumes, adjust for pass-by and diverted trips, and correct illogical output.

VII. TRAFFIC GENERATION

Use of SANDAG [Traffic Generators manual and (Not So) Brief Guide….]or City of San Diego [both of the City's Traffic Impact Study Manual and Trip Generation Manual] rates should first be considered. Next, consider rates from ITE's latest Trip Generation manual or ITE Journal articles. If local and sufficient national data do not exist, conduct trip generation studies at sites with characteristics similar to those of the proposed project. If this is not feasible due to the uniqueness of the land use, it may be acceptable to estimate defensible trip rates – only if appropriate documentation is provided.

Reasonable reductions to trip rates may also be considered: (a) with proper analysis of pass-by and diverted traffic on adjacent roadways, (b) for developments near transit stations, and (c) for mixed-use developments. (Note: Caltrans and local agencies may use different trip reduction rates. Early consultation with the reviewing agencies is strongly recommended.)

Site traffic distribution, assignment, necessary model adjustments, and Congestion Management Program (CMP) concerns should all follow current SANDAG and City of San Diego procedures.

VIII. TIS ANALYSIS

The TIS analysis shall determine the effect that a project will have for each of the previously outlined study scenarios. Peak-hour capacity analyses for freeways, roadway segments (ADTs may be used here to estimate V/C ratios), intersections, and freeway ramps must be conducted for both the near-term and long-term conditions. The methodologies used in determining the traffic impact are not only critical to the validity of the analysis, they are pertinent to the credibility and confidence the decision-makers have in the resulting findings, conclusions, and recommendations.

The following methodologies for TIS analysis should be used (unless early consultation with the lead agency and Caltrans has established other methods), along with some suggested software packages and options:

1. Arterials, Multi-lane and Two-lane Highways, and all other Local Streets - current Highway Capacity Manual [HCM]: w/Highway Capacity Software [HCS]
2. Signalized Intersections – HCM: w/HCS, TRAFFIX, SigCinema, and SYNCHRO acceptable to Caltrans; and, HCS, TRAFFIX, SIGNAL 94, and NCAP acceptable to local jurisdictions
3. Unsignalized Intersections – HCM
4. Freeway Segments – HCM or Caltrans District 11 freeway LOS definitions (see Attachment C): w/HCS
5. Freeway Weaving Areas – Caltrans Highway Design Manual (Chapter 500)
6. Freeway Ramps – Caltrans District 11 Ramp Metering Analysis (Attachment B), and Caltrans Ramp Meter Design Guidelines (August 1995), HCS (for ramp design only)
7. Freeway Interchanges – HCM: for diamond interchanges where the timing and phasing of the two signals must be coordinated to ensure queue clearances, consider Passer III-90
8. Transit, Pedestrians, and Bicycles – HCM
9. Warrants for Traffic Signals, Stop Signs, School Crossings, Freeway Lighting, etc. – Caltrans' Traffic Manual

10. Channelization and Intersection Geometry - Caltrans' Traffic Manual and Guidelines for Reconstruction of Intersections, City of San Diego's Traffic Impact Study Manual -Appendix 4

Note: Neither local jurisdictions nor Caltrans officially advocate the use of any special software packages, especially since new ones are being developed all the time. However, consistency with the Highway Capacity Manual (HCM) is advocated in most cases. The above-mentioned software packages have been utilized locally. Because it is so important to have consistent end results, always consult with all affected jurisdictions, including Caltrans, regarding the analytical techniques and software being considered (especially if they differ from above) for the TIS.

IX. SIGNIFICANCE OF TRAFFIC IMPACTS TO CONSIDER MITIGATION

The following Table 1 indicates when a project's impact is significant – and mitigation measures are to be identified. That is, if a project's traffic impact causes the values in this table to be exceeded, it is determined to be a significant project impact. (Mitigation for all identified significant impacts should be provided for any project requiring CEQA analysis.)

Note: It is the responsibility of Caltrans, on Caltrans initiated projects, to mitigate the effect of ramp metering, for initial as well as future operational impacts, on local streets that intersect and feed entrance ramps to the freeway. Developers and/or local agencies, however, should be required to mitigate any impact to existing ramp meter facilities, future ramp meter installations, or local streets, when those impacts are attributable to new development and/or local agency roadway improvement projects.

Not all mitigation measures can feasibly be "hard" (new lanes or new capacity) improvements. A sample mitigation measure might include financing toward a regional ITS [Intelligent Transportation System] project, such as improved or "dynamic" ramp metering with real-time delay information available to motorists. The information can be accessed on either home or in-vehicle computers, or even by telephone (each ramp could have its own phone number with delay information) so the motorist can make a driving decision long before she or he arrives at a congested on-ramp. This sample mitigation would allow a project applicant (especially with a relatively small project) to meet mitigation by paying into a regional ramp meter fee, providing the fee can be established in the near future.

Other mitigation measures may include Transportation Demand Management recommendations – transit facilities, bike facilities, walkability, telecommuting, traffic rideshare programs, flex-time, carpool incentives, parking cash-out, etc. Additional mitigation measures may become acceptable as future technologies and policies evolve.

Table 1

MEASURE OF SIGNIFICANT PROJECT TRAFFIC IMPACTS

Level of Service with Project*	Allowable Change due to Project Impact**					
	Freeways		Roadway Segments		Intersections	Ramp*** Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay(min.)
D, E, & F (or ramp meter delays above 15 min.)	0.01	1	0.02	1	2	2

NOTES:

* All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 2 or a similar LOS chart for each jurisdiction). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigation (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see above * note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating significant impact changes.

*** See Attachment B for ramp metering analysis.

KEY: V/C = Volume to Capacity ratio
Speed = Speed measured in miles per hour
Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters
LOS = Level of Service

Table 2

ROADWAY CLASSIFICATIONS, LEVELS OF SERVICE (LOS) AND AVERAGE DAILY TRAFFIC (ADT)

			LEVEL OF SERVICE W/ADT**				
STREET CLASSIFICATION	LANES	CROSS SECTIONS* (APPROX.)	A	B	C	D	E
Expressway	6 lanes	102-160/122-200	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6 lanes	102-108/122-128	25,000	35,000	50,000	55,000	60,000
Major Arterial	6 lanes	102/122	20,000	28,000	40,000	45,000	50,000
Major Arterial	4 lanes	78-82/98-102	15,000	21,000	30,000	35,000	40,000
Secondary Arterial/ Collector	4 lanes	64-72/84-92	10,000	14,000	20,000	25,000	30,000
Collector (no center lane) (continuous left-turn lane)	4 lanes 2 lanes	64/84 50/70	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 lanes	40/60	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2 lanes	50/70	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 lanes	40/60	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single-family)	2 lanes	36/56	---	---	2,200	---	---

LEGEND:

* Curb to curb width (feet)/right of way width (feet): based upon the City of San Diego Street Design Manual and other jurisdictions within the San Diego region.

** Approximate recommended ADT based upon the City of San Diego Street Design Manual.

NOTES:

1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

X. SCREEN CHECK

As part of the first draft of a TIS, the preparer must ensure that all required elements have been included. This screen check procedure will help reduce the number of submittals, and will encourage early dialog between the reviewer and the preparer. The local agency reviewer will check the study for completeness, and strive to return all incomplete submittals within seven working days. A presubmittal conference is encouraged to determine which elements are not required for the TIS.

Attachment A contains the TIS Screen Check.

ATTACHMENT A

To be completed by Staff:
Date Received _____
Reviewer _____
Date Screen Check _____

TRAFFIC IMPACT STUDY SCREEN CHECK

To be completed by consultant (including page #):

Name of Traffic Study _____
Consultant _____
Date Submitted _____

Indicate Page # in report:			Satisfactory YES	Satisfactory NO	NOT REQUIRED
pg. ____	1.	Table of contents, list of figures and list of tables.	☐	☐	
pg. ____	2.	Executive summary.	☐	☐	
pg. ____	3.	Map of the proposed project location.	☐	☐	
	4.	General project description and background information:			
pg. ____		a. Proposed project description (acres, dwelling units….)	☐	☐	
pg. ____		b. Total trip generation of proposed project.	☐	☐	
pg. ____		c. Community plan assumption for the proposed site.	☐	☐	
pg. ____		d. Discuss how project affects the Congestion Management Program, if applicable	☐	☐	
pg. ____	5.	Parking, transit and on-site circulation discussions are included.	☐	☐	
pg. ____	6.	Map of the Transportation Impact Study Area and specific intersections studied in the traffic report.	☐	☐	
pg. ____	7.	Existing Transportation Conditions:			
		a. Figure identifying roadway conditions including raised medians, median openings, separate left and right turn lanes, roadway and intersection dimensions, bike lanes, parking, number of travel lanes, posted speed, intersection controls, turn restrictions and intersection lane configurations.	☐	☐	
		b. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
		c. Figure or table showing level of service (LOS) for intersections during peak hours and roadway sections within the study area (include analysis sheets in an appendix).	☐	☐	
	8.	Project Trip Generation:			
pg. ____		Table showing the calculated project generated daily (ADT) and peak hour volumes.	☐	☐	
pg. ____	9.	Project Trip Distribution using the current TRANPLAN Computer Traffic Model (provide a computer plot) or manual assignment if previously approved. (Identify which method was used.)	☐	☐	
	10.	Project Traffic Assignment:			
pg. ____		a. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
pg. ____		b. Figure showing pass-by-trip adjustments, and, if cumulative trip rates are used.	☐	☐	☐
	11.	Existing Near-term Cumulative Conditions:			
pg. ____		a. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
pg. ____		b. Figure or table showing the projected LOS for intersections during peak hours and roadway sections within the study area (analysis sheets included in the appendix).	☐	☐	
pg. ____		c. Traffic signal warrant analysis (Caltrans Traffic Manual) for appropriate locations.	☐	☐	
	12.	Existing Near-term Cumulative Conditions + Proposed Project (each phase			

Indicate Page # in report:			Satisfactory YES	Satisfactory NO	NOT REQUIRED
	when applicable)				
pg. ____	a.	Figure or table showing the projected LOS for intersections during peak hours and roadway sections with the project (analysis sheets included in the appendix).	☐	☐	
pg. ____	b.	Figure showing other projects that were included in the study, and the assignment of their site traffic.	☐	☐	
pg. ____	c.	Traffic signal warrant analysis for appropriate locations.	☐	☐	
	13.	Horizon Year Transportation Conditions (if project conforms to the General/ Community Plan):			
pg. ____	a.	Horizon Year ADT and street classification that reflect the Community Plan.	☐	☐	☐
pg. ____	b.	Figure or table showing the horizon LOS for intersections during peak hours and roadway sections with and without the project (analysis sheets included in the appendix).	☐	☐	☐
pg. ____	c.	Traffic signal warrant analysis at appropriate locations.	☐	☐	☐
	14.	Horizon Year Transportation Conditions + Proposed Project (if project does not conform to the General/Community Plan):			
pg. ____	a.	Horizon Year ADT and street classification as shown in the Community Plan.	☐	☐	☐
pg. ____	b.	Horizon Year ADT and street classification for two scenarios: with the proposed project and with the land use assumed in the Community Plan.	☐	☐	☐
pg. ____	c.	Figure or table showing the horizon LOS for intersections during peak hours and roadway sections for two scenarios: with and without the proposed project and with the land use assumed in the Community Plan (analysis sheets included in the appendix).	☐	☐	☐
pg. ____	d.	Traffic signal warrant analysis at appropriate locations with the land use assumed in the General/Community Plan.	☐	☐	☐
pg. ____	15.	A summary table showing the comparison of Existing, Existing + Near-term Cumulative, Existing + Near-term Cumulative + Proposed Project, Horizon Year, and Horizon Year + Proposed Project (if different from General/Community Plan), LOS on roadway sections and intersections during peak hours.	☐	☐	
pg. ____	16.	A summary table showing the project's "significant traffic impacts."	☐	☐	
	17.	Transportation Mitigation Measures:			
pg. ____	a.	Table identifying the mitigations required that are the responsibility of the developer and others. A phasing plan is required if mitigations are proposed in phases.	☐	☐	
pg. ____	b.	Figure showing all proposed mitigations that include: intersection lane configurations, lane widths, raised medians, median openings, roadway and intersection dimensions, right-of-way, offset, etc.	☐	☐	
pg. ____	18.	The Highway Capacity Manual Operation Method or other approved method is used at appropriate locations within the study area.	☐	☐	
pg. ____	19.	Analysis complies with Congestion Management Program requirements.	☐	☐	☐
pg. ____	20.	Appropriate freeway analysis is included.	☐	☐	☐
pg. ____	21.	Appropriate freeway ramp metering analysis is included.	☐	☐	☐
pg. ____	22.	The traffic study is signed by a California Registered Traffic Engineer.	☐	☐	

THE TRAFFIC STUDY SCREEN CHECK FOR THE SUBJECT PROJECT IS:

_____ Approved

_____ Not approved because the following items are missing:

_____

_____

_____

ATTACHMENT B

RAMP METERING ANALYSIS

Ramp metering analysis should be performed for each horizon year scenario in which ramp metering is expected. The following table shows relevant information that should be included in the ramp meter analysis "Summary of Freeway Ramp Metering Impacts."

LOCATION	DEMAND (veh/hr)[1]	METER RATE (veh/hr)[2]	EXCESS DEMAND (veh/hr)[3]	DELAY (min)[4]	QUEUE (feet)[5]

NOTES:

[1] DEMAND is the peak hour demand expected to use the on-ramp.

[2] METER RATE is the peak hour capacity expected to be processed through the ramp meter. This value should be obtained from Caltrans. Contact Carolyn Rumsey at (619) 467-3029.

[3] EXCESS DEMAND = (DEMAND) – (METER RATE) or zero, whichever is greater.

[4] $\text{DELAY} = \dfrac{\text{EXCESS DEMAND}}{\text{METER RATE}} \times 60 \text{ MINUTES/HOUR}$

[5] QUEUE = (EXCESS DEMAND) X 29 feet/vehicle

NOTE: Delay will be less at the beginning of metering. However, since peaks will almost always be more than one hour, delay will be greater after the first hour of metering. (See discussion on next page.)

SUMMARY OF FREEWAY RAMP METERING IMPACTS
(Lengthen as necessary to include all impacted meter locations)

LOCATION(S)	PEAK HOUR	PEAK HOUR DEMAND D	FLOW (METER RATE) F	EXCESS DEMAND E	DELAY (MINUTES)	QUEUE Q (feet)
	AM PM					
	AM PM					
	AM PM					

DISCUSSION OF RAMP METER ANALYSIS

A. CAUTION: The ramp metering analysis shown in Attachment B may lead to grossly understated results for delay and queue length, since important aspects of queue growth are ignored. Also, the draft guidelines method derives average values instead of maximum values for delay and queue length. Utilizing average values instead of maximum values can lead to obscuring important effects, particularly in regard to queue length.

Predicting ramp meter delays and queues requires a storage-discharge type of analysis, where a pattern of arriving traffic at the meter is estimated by the analyst, and the discharge, or meter rate, is a somewhat fixed value set by Caltrans for each individual metered ramp.

Since a ramp meter queue continues to grow longer during all times that the arrival rate exceeds the discharge rate, the maximum queue length (and hence, the maximum delay) usually occurs after the end of the peak (or highest) one hour. This leads to the need for an analysis for the entire time period during which the arrival rate exceeds the meter rate, not just the peak hour. For a similar reason, the analysis needs to consider that a substantial queue may have already formed by the beginning of the "peak hour." Traffic arriving during the peak hour is then stacked onto an existing queue, not just starting from zero as the draft analysis suggests.

Experience shows that the theoretical queue length derived by this analysis often does not materialize. Motorists, after a brief time of adjustment, seek alternate travel paths or alternate times of arrival at the meter. The effect is to approximately minimize total trip time by seeking out the best combinations of route and departure time at the beginning of the trip. This causes at least two important changes in the pattern or arriving traffic at ramp meters. First, the peak period is spread out, with some traffic arriving earlier and some traffic arriving later than predicted. Second, a significant proportion of the predicted arriving traffic will use another ramp, use another freeway, or stay on surface streets.

It is acceptable to make reasonable estimates of these temporal and spatial (time and occupying space) diversions as long as all assumptions are stated and that the unmodified, or theoretical values are shown for comparison.

B. Additional areas for study include being able to define acceptable levels of service (LOS) and "significant" thresholds (e.g., a maximum ramp meter delay of 15 minutes) for metered freeway entrance ramps.

Currently there are no acceptable software programs for measuring project impacts on metered freeway ramps nor does the Highway Capacity Manual (HCM) adequately address this issue. Hopefully in the near future a regionwide study will be initiated to determine what metering rate (at each metered ramp) would be required in order to guarantee that traffic will flow (even at LOS "E") on the entire freeway system during peak-hour conditions. From this, the ramp delays and resultant queue lengths might then be calculated. Overall, this is a very complex issue that needs considerable research and refinement in cooperation with Caltrans.

ATTACHMENT C

LEVEL OF SERVICE (LOS) DEFINITIONS (generally used by Caltrans)

The concept of Level of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A Level of Service[s] definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. Levels of Service definitions can generally be categorized as follows:

LOS	D/C*	Congestion/Delay	Traffic Description
		(Used for freeways, expressways and conventional highways[A])	
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
		(Used for conventional highways)	
"F"	>1.00	Considerable	Forced or breakdown. Delay measured in average flow, travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
		(Used for freeways and expressways)	
"F0"	1.01-1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe 1-2 hour delay	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe 3+ hours of delay	Gridlock.

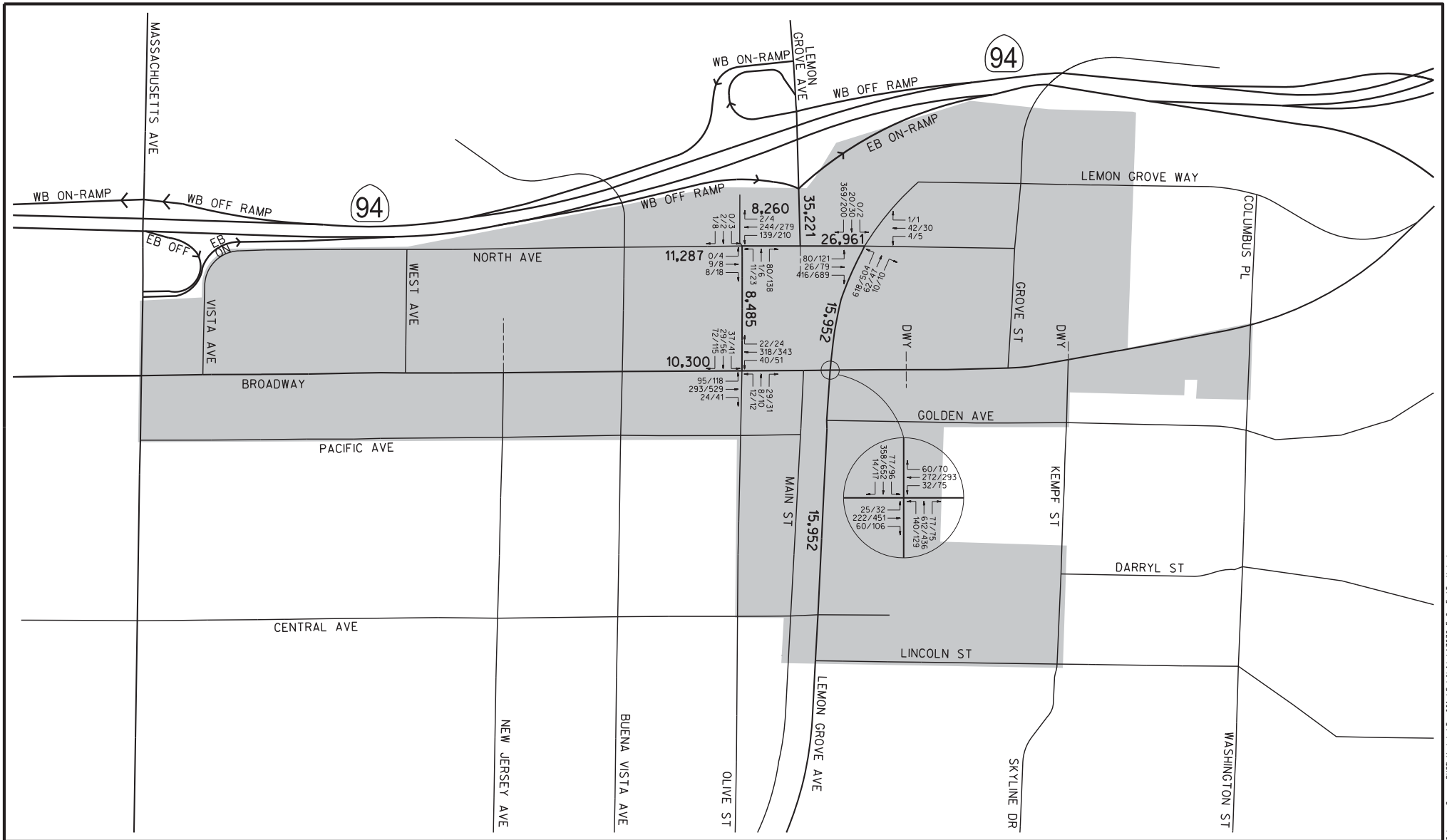
[s] Level of Service can generally be calculated using "Table 3.1. LOS Criteria for Basic Freeway Sections" from the latest Highway Capacity Manual. However, contact Caltrans for more specific information on determining existing "free-flow" freeway speeds.

* Demand/Capacity ratio used for forecasts (V/C ratio used for operational analysis, where V = volume)

[A] Arterial LOS is based upon average "free-flow" travel speeds, and should refer to definitions in Table 11.1 in the HCM.

APPENDIX F

ADJUSTED TRAFFIC VOLUMES DUE TO LEMON GROVE AVENUE REALIGNMENT PROJECT



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165

FIGURE A
LEMON GROVE AVENUE REALINGMENT TRAFFIC VOLUMES
LEMON GROVE DOWNTOWN SPECIFIC PLAN

LEGEND
XX/XX = AM/PM PEAK VOLUMES
X,XXX = ADT
= LEMON GROVE DOWNTOWN VILLAGE SPECIFIC PLAN BOUNDARY

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21-FEB-2018 14:55

APPENDIX G

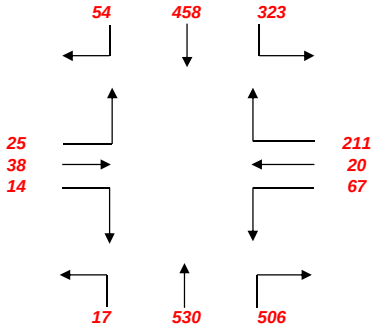
2035 WITHOUT SPECIFIC PLAN FORECASTED TRAFFIC VOLUMES

No Build Conditions

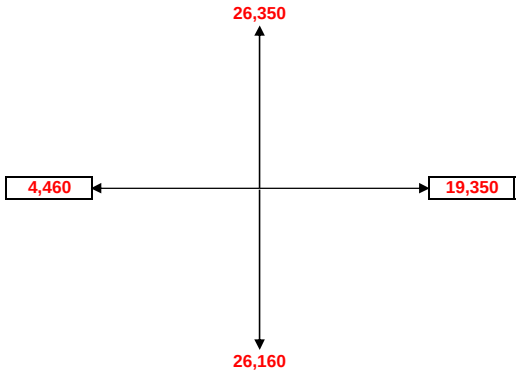
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbound Ramps

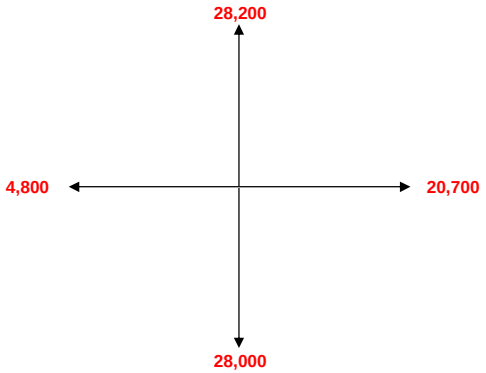
2016 Baseline Peak Hour Turning Movement Volumes (AM)



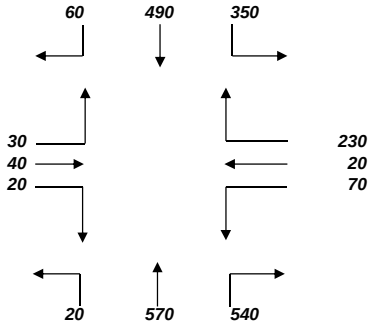
2016 Baseline ADTs



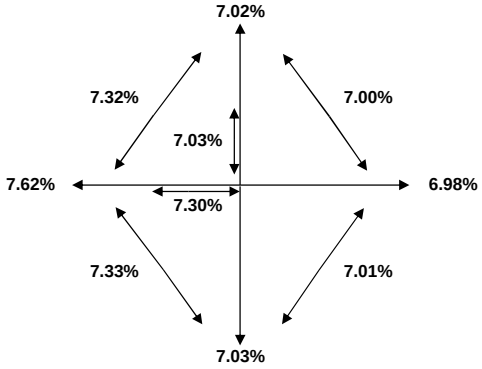
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

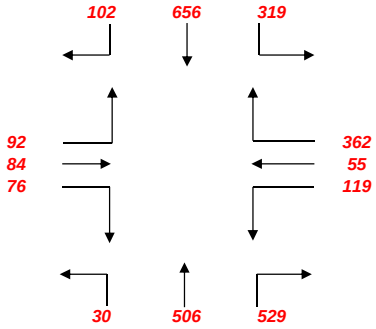


No Build Conditions

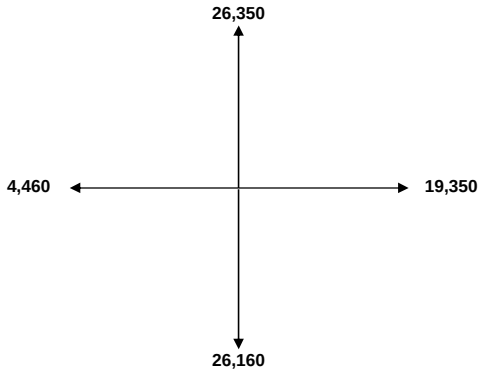
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbo

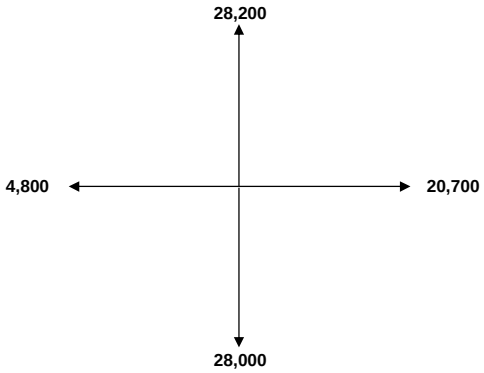
2016 Baseline Peak Hour Turning Movement Volumes (PM)



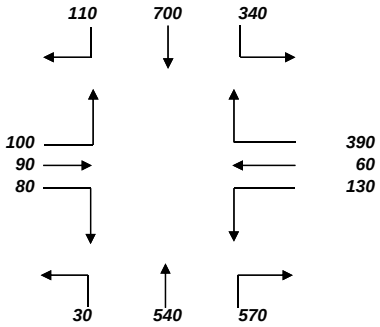
2016 Baseline ADTs



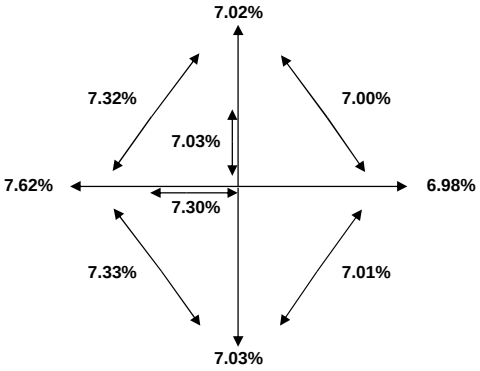
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

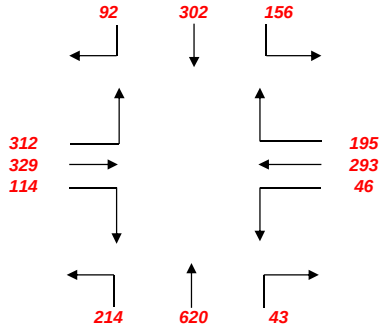


No Build Conditions

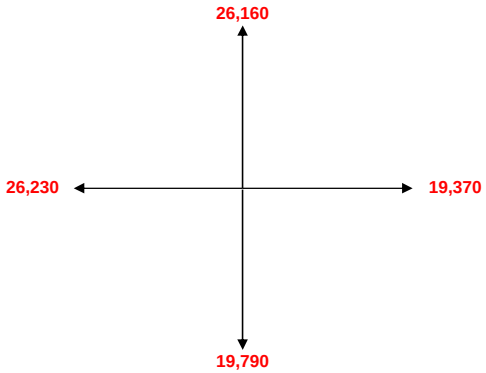
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

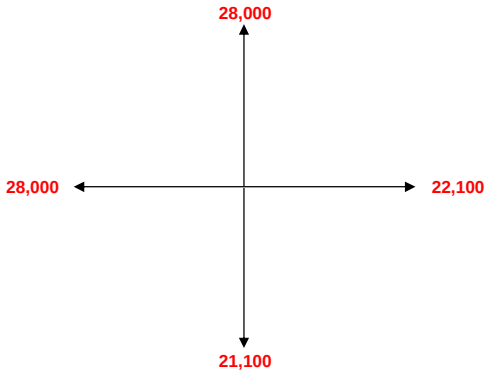
2016 Baseline Peak Hour Turning Movement Volumes (AM)



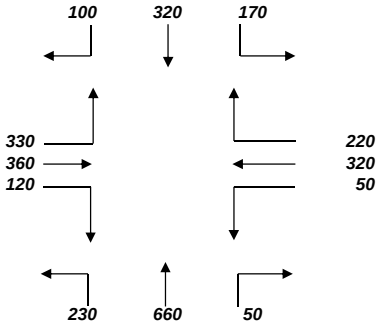
2016 Baseline ADTs



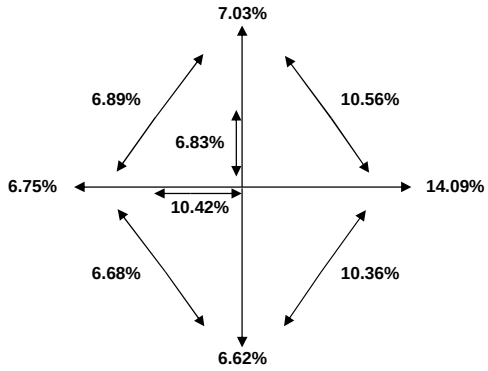
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

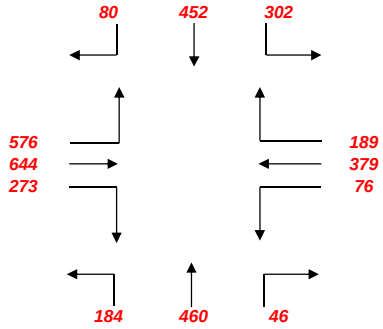


No Build Conditions

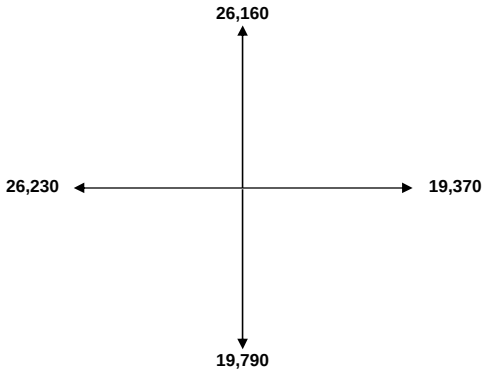
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

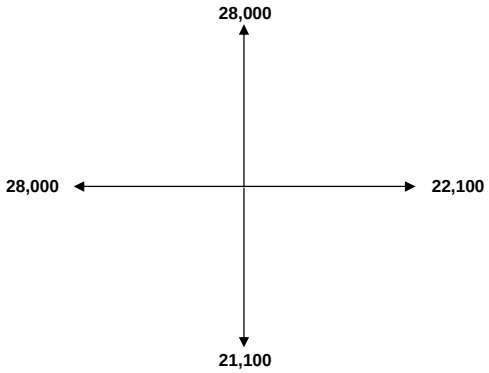
2016 Baseline Peak Hour Turning Movement Volumes (PM)



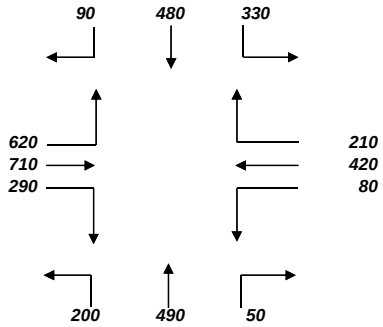
2016 Baseline ADTs



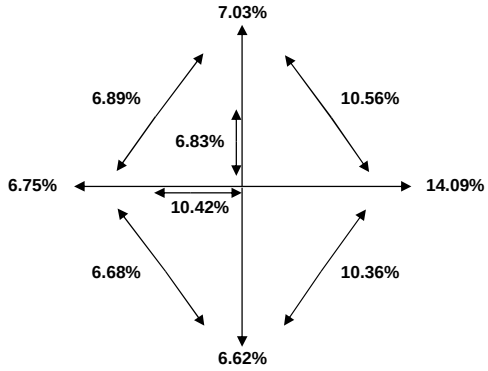
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

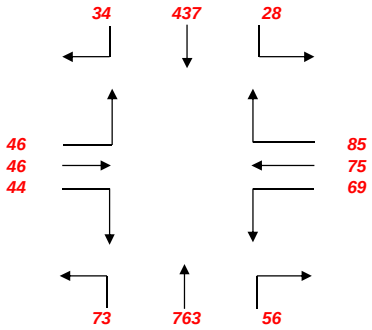


No Build Conditions

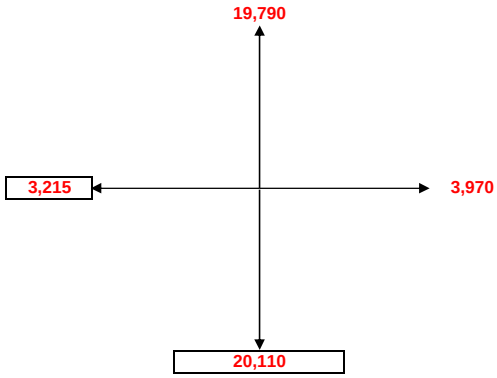
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

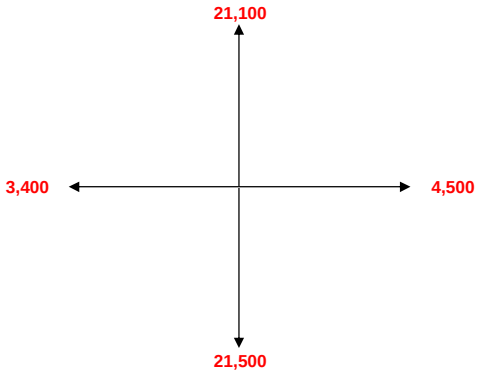
2016 Baseline Peak Hour Turning Movement Volumes (AM)



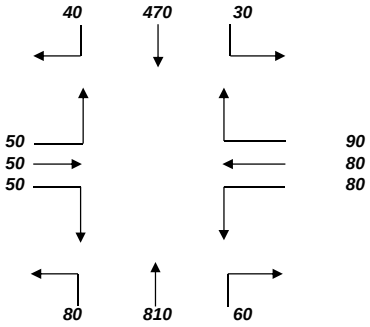
2016 Baseline ADTs



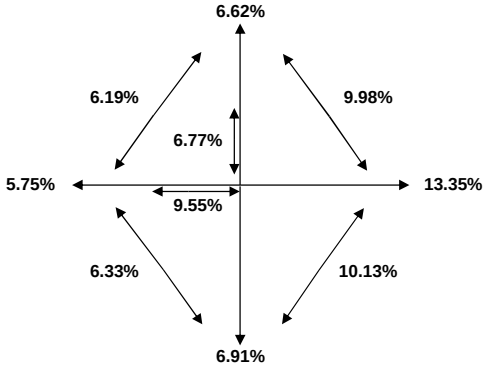
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

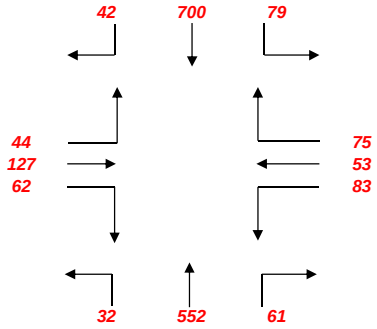


No Build Conditions

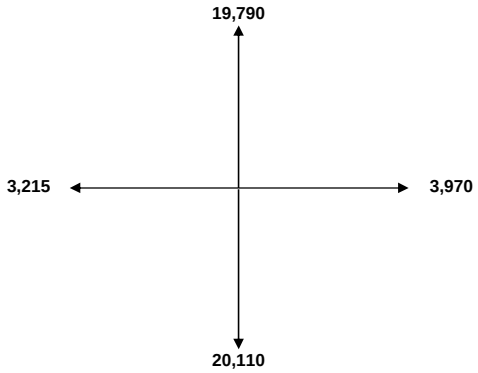
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

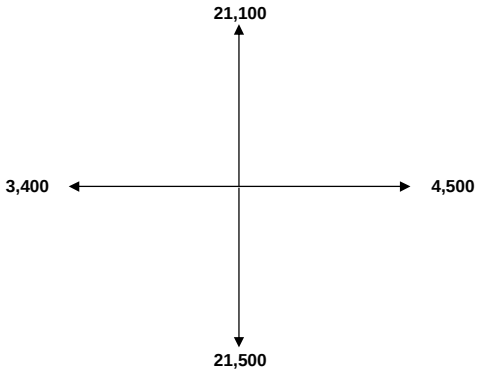
2016 Baseline Peak Hour Turning Movement Volumes (PM)



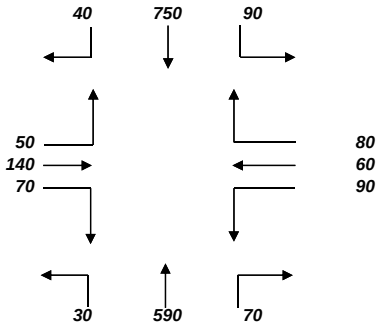
2016 Baseline ADTs



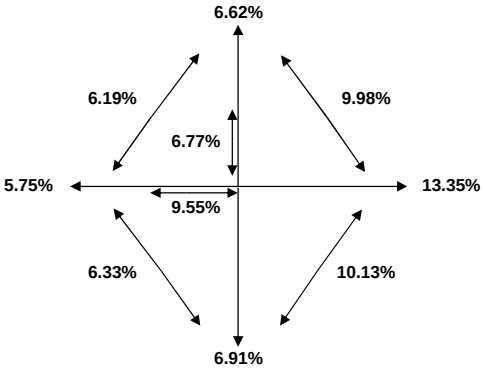
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

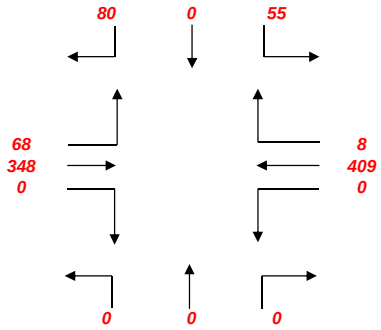


No Build Conditions

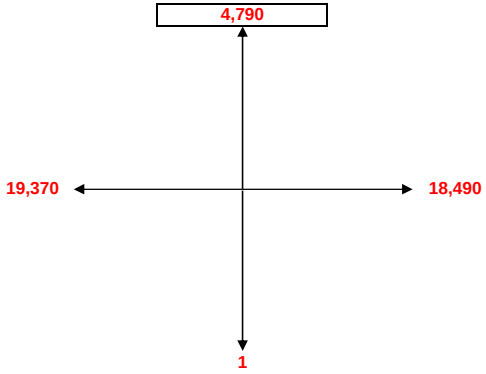
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

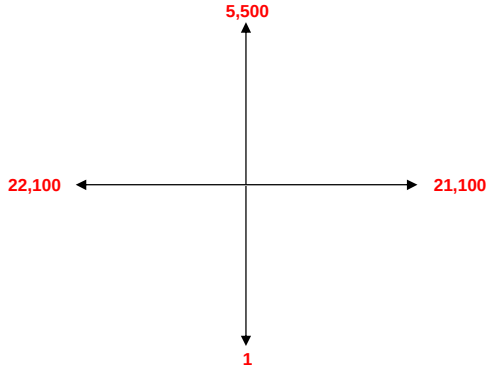
2016 Baseline Peak Hour Turning Movement Volumes (AM)



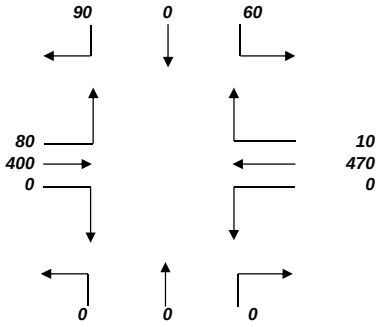
2016 Baseline ADTs



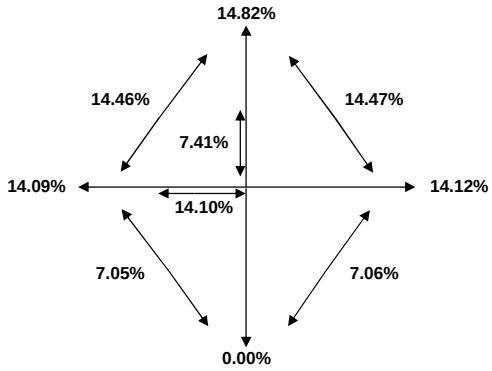
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

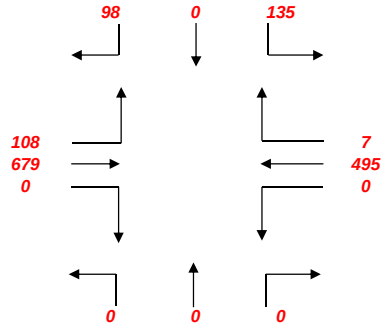


No Build Conditions

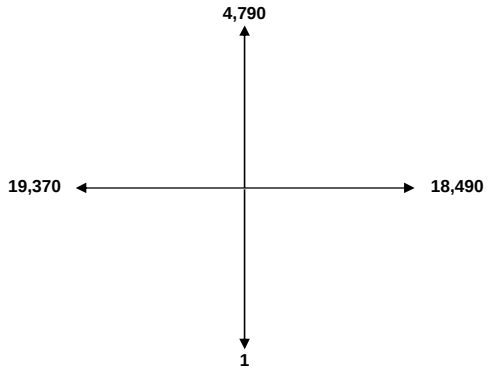
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

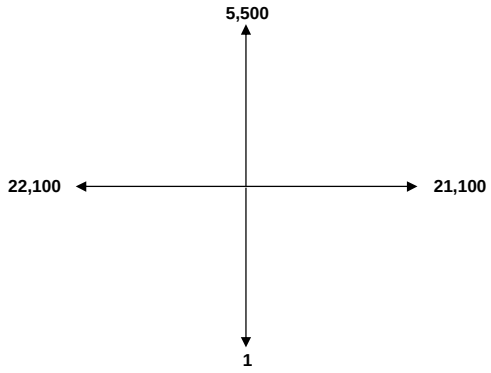
2016 Baseline Peak Hour Turning Movement Volumes (PM)



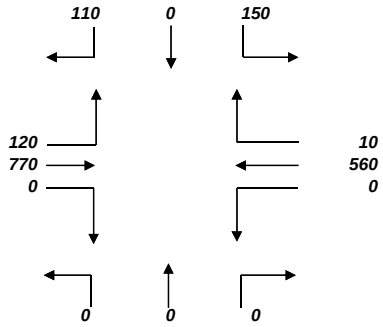
2016 Baseline ADTs



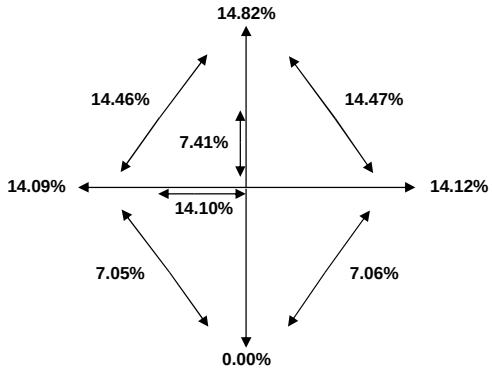
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

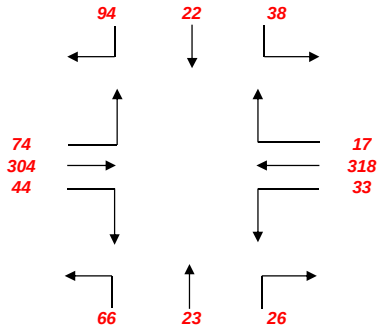


No Build Conditions

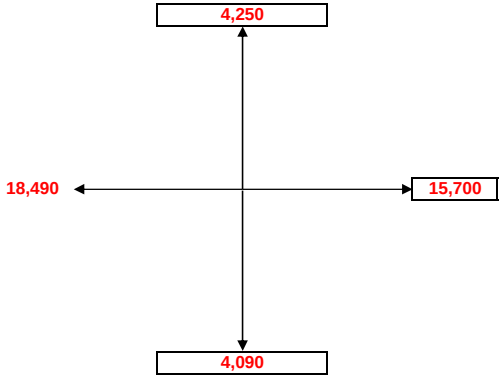
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

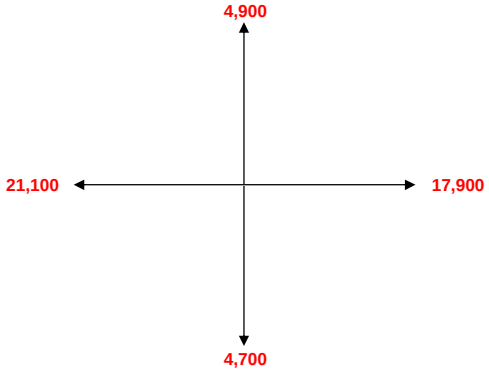
2016 Baseline Peak Hour Turning Movement Volumes (AM)



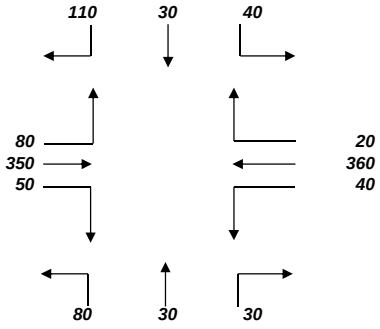
2016 Baseline ADTs



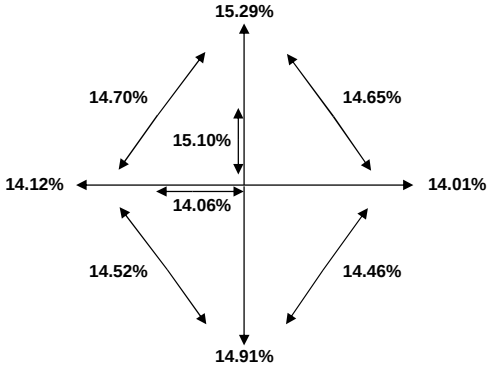
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

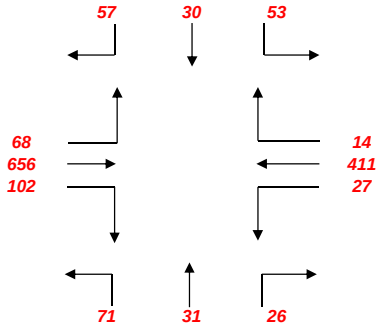


No Build Conditions

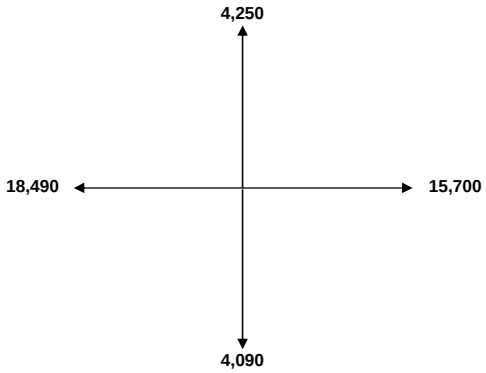
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

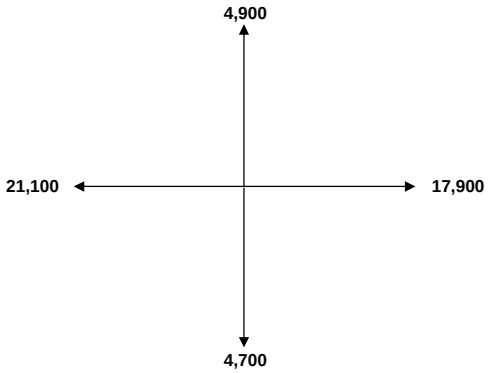
2016 Baseline Peak Hour Turning Movement Volumes (PM)



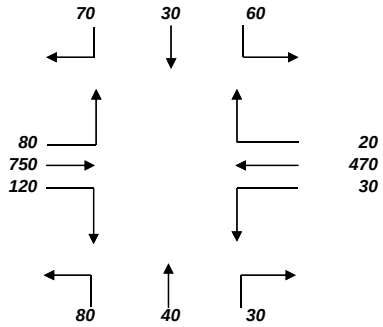
2016 Baseline ADTs



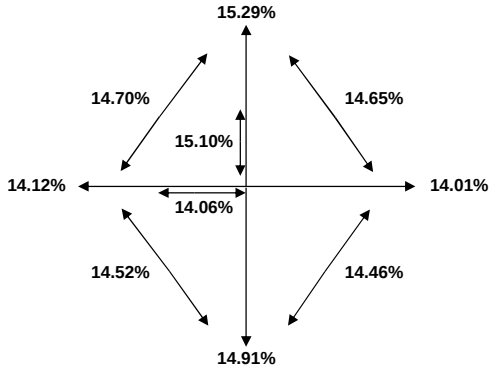
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

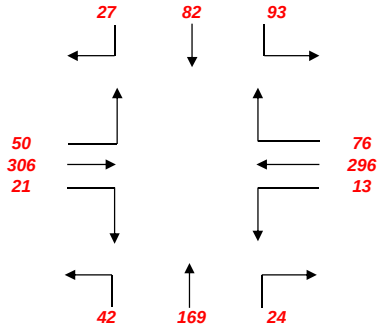


No Build Conditions

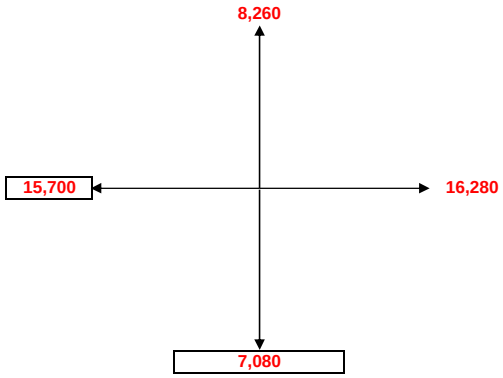
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

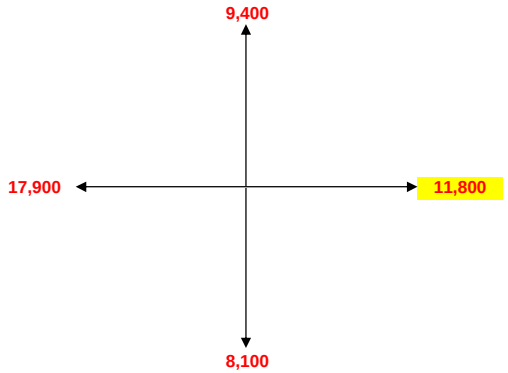
2016 Baseline Peak Hour Turning Movement Volumes (AM)



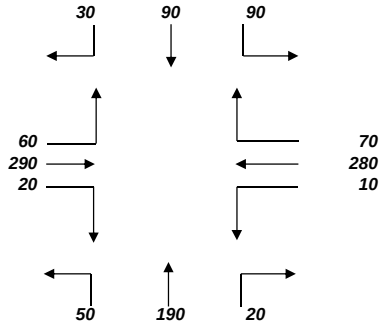
2016 Baseline ADTs



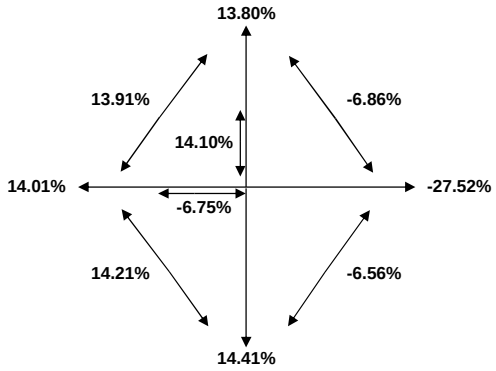
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

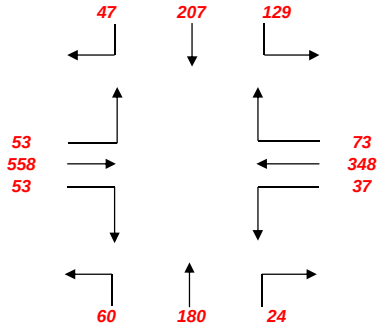


No Build Conditions

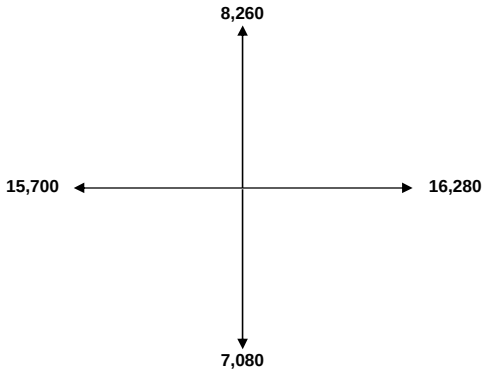
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

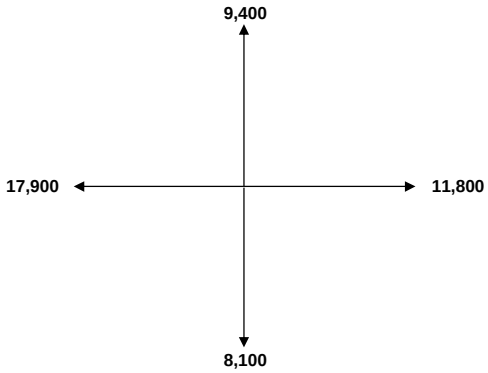
2016 Baseline Peak Hour Turning Movement Volumes (PM)



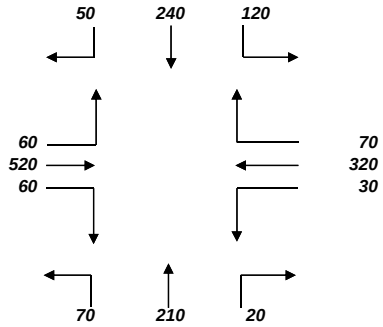
2016 Baseline ADTs



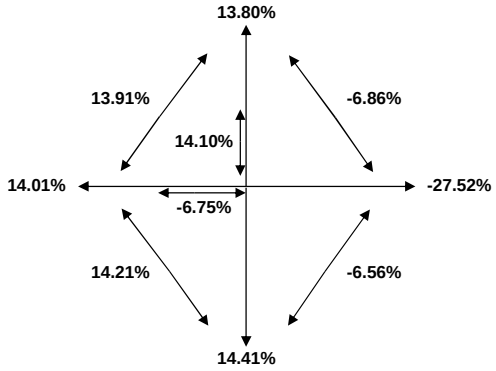
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

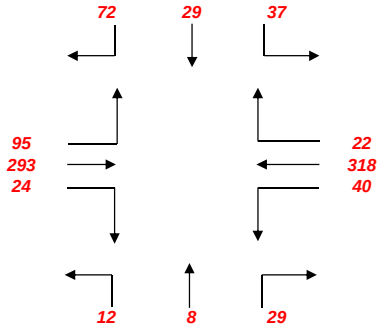


No Build Conditions

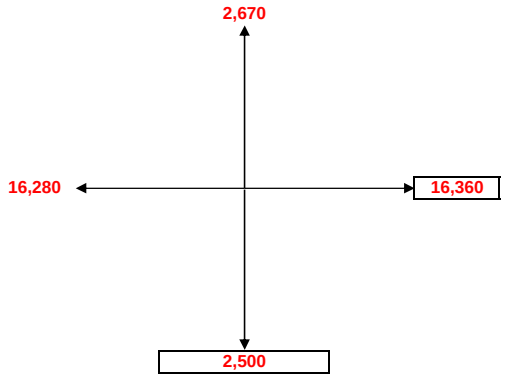
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

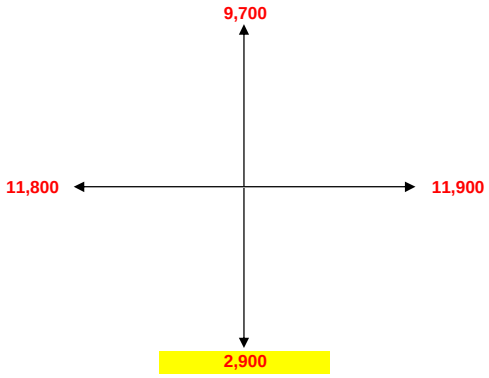
2016 Baseline Peak Hour Turning Movement Volumes (AM)



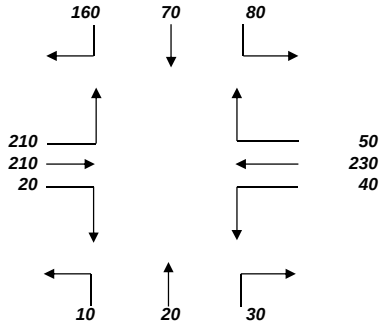
2016 Baseline ADTs



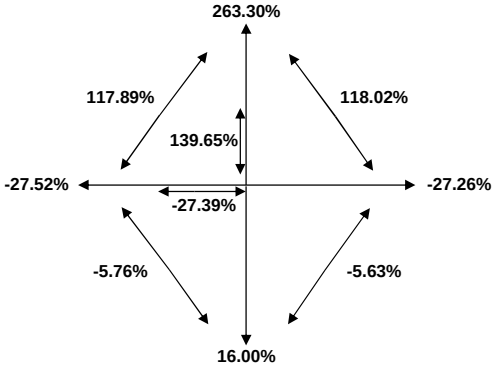
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

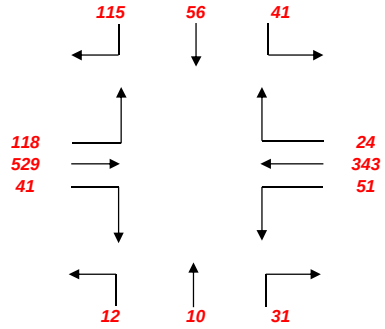


No Build Conditions

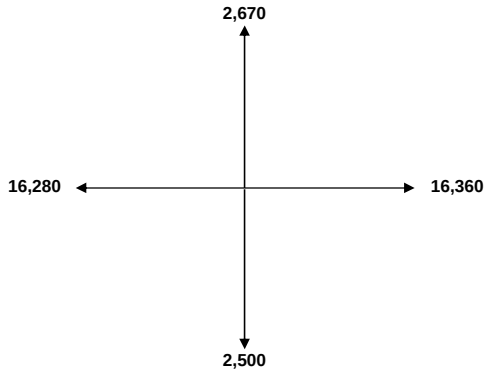
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

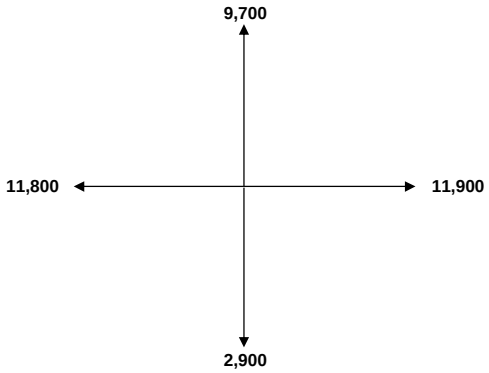
2016 Baseline Peak Hour Turning Movement Volumes (PM)



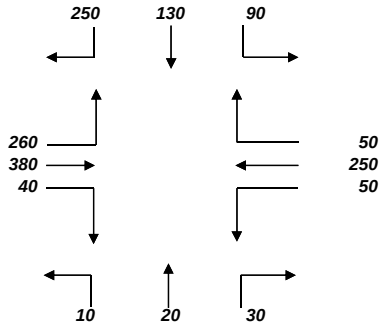
2016 Baseline ADTs



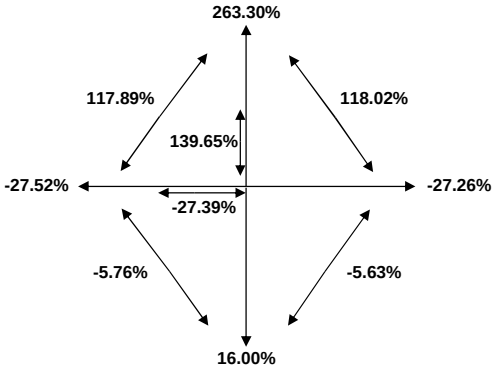
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

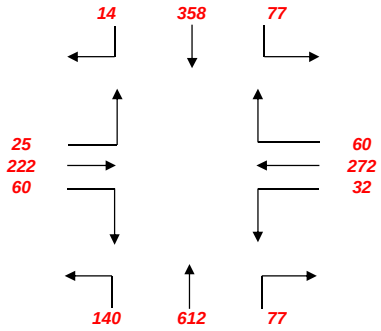


No Build Conditions

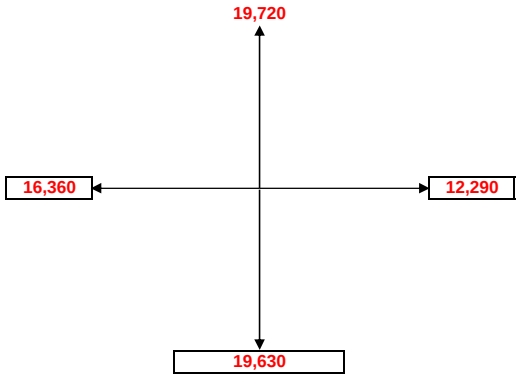
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

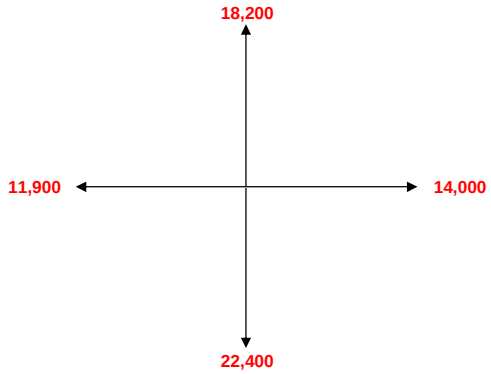
2016 Baseline Peak Hour Turning Movement Volumes (AM)



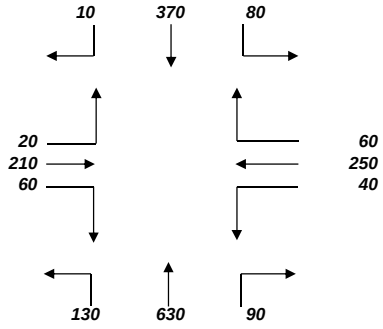
2016 Baseline ADTs



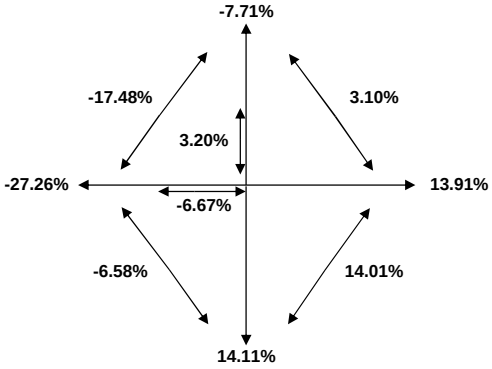
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

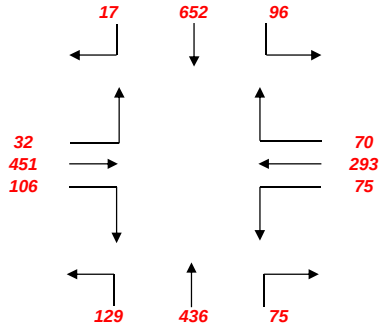


No Build Conditions

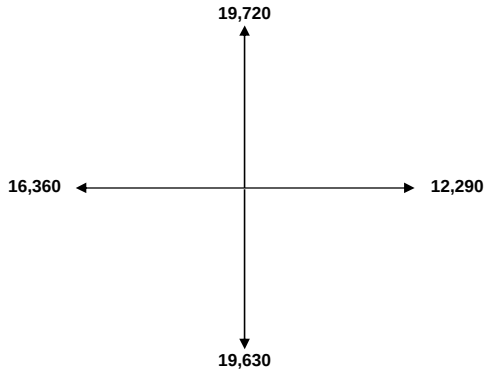
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

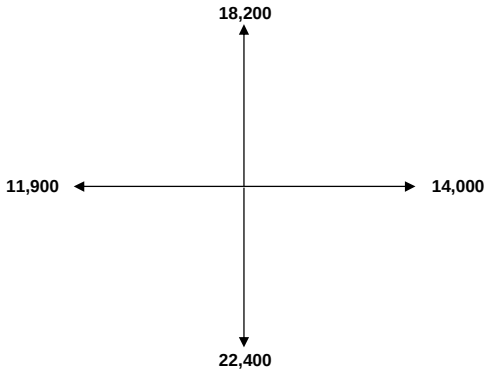
2016 Baseline Peak Hour Turning Movement Volumes (PM)



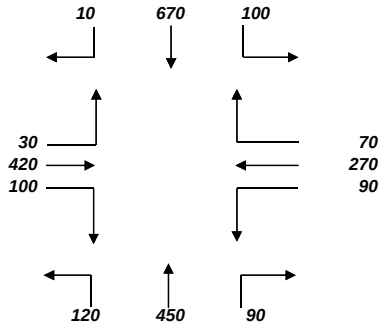
2016 Baseline ADTs



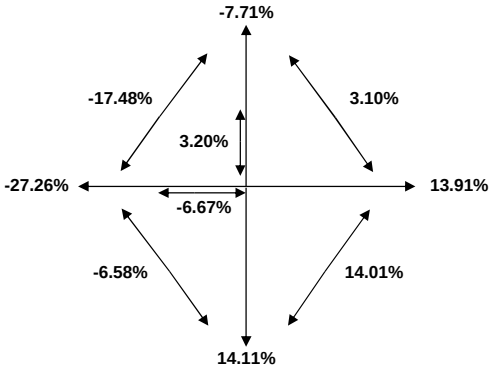
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

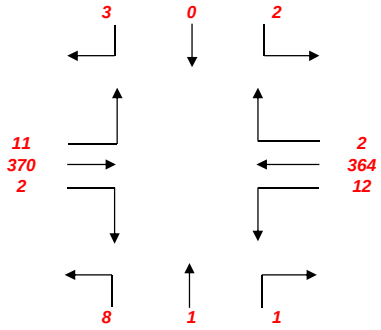


No Build Conditions

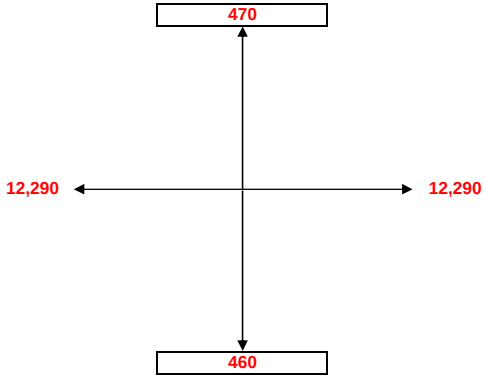
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

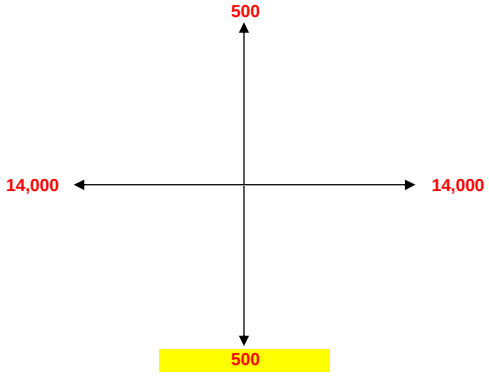
2016 Baseline Peak Hour Turning Movement Volumes (AM)



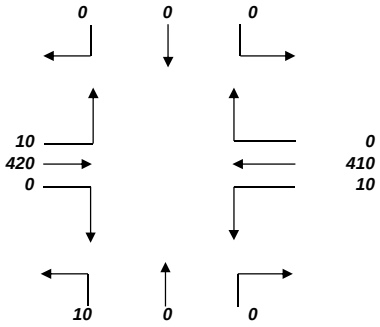
2016 Baseline ADTs



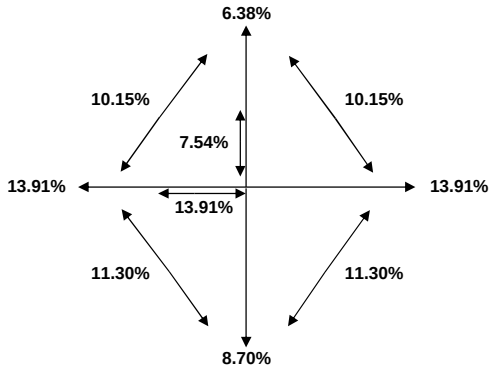
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

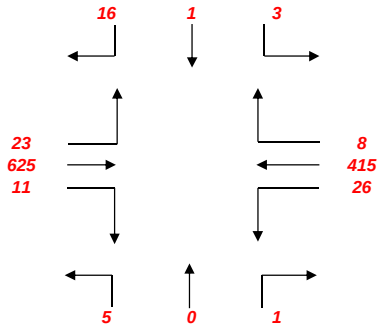


No Build Conditions

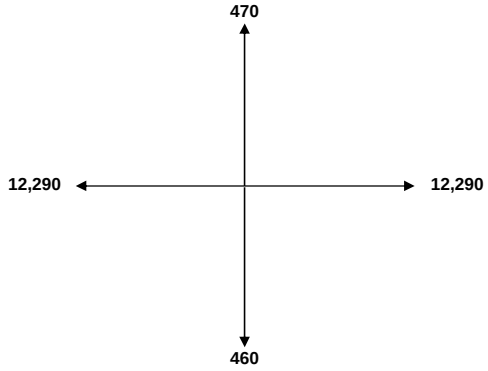
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

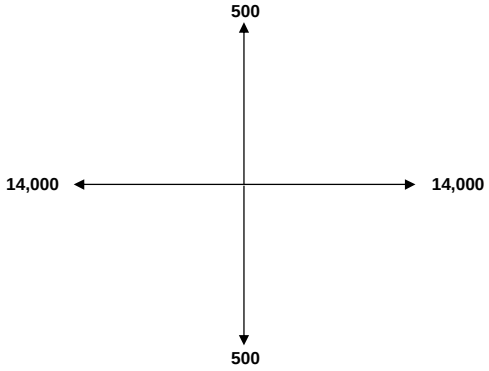
2016 Baseline Peak Hour Turning Movement Volumes (PM)



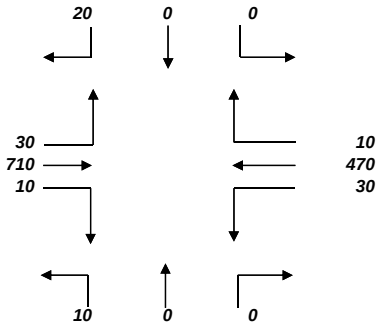
2016 Baseline ADTs



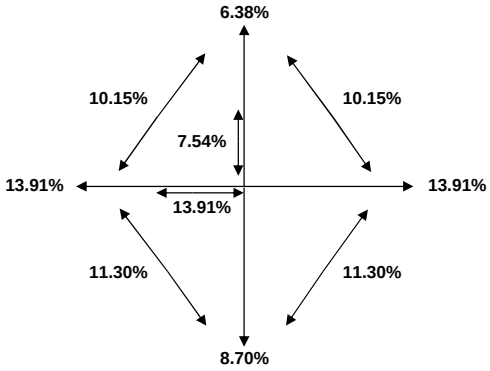
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

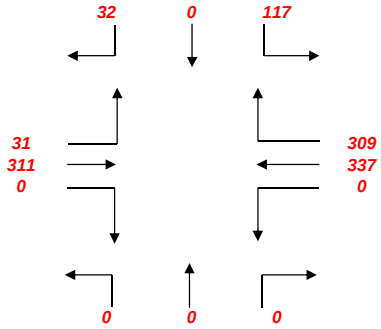


No Build Conditions

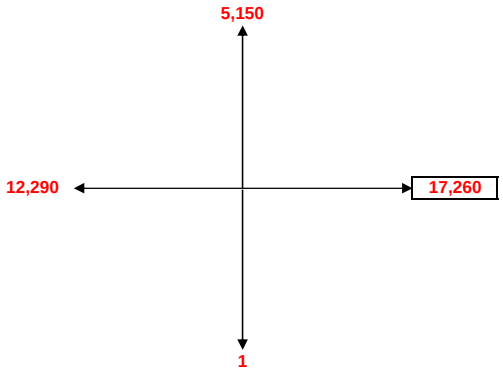
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

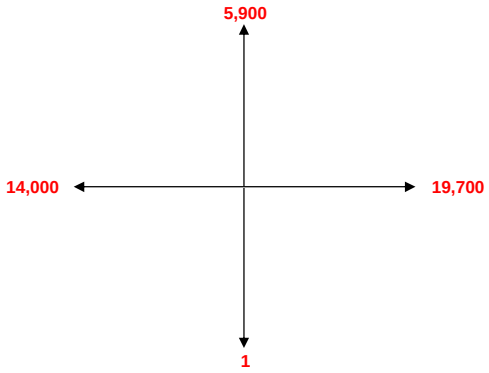
2016 Baseline Peak Hour Turning Movement Volumes (AM)



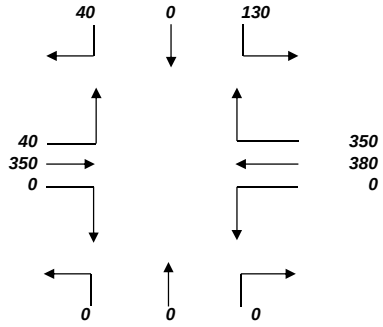
2016 Baseline ADTs



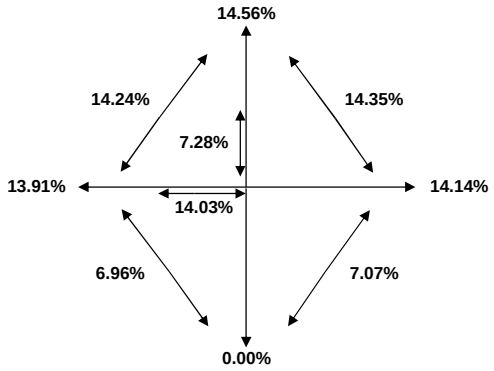
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

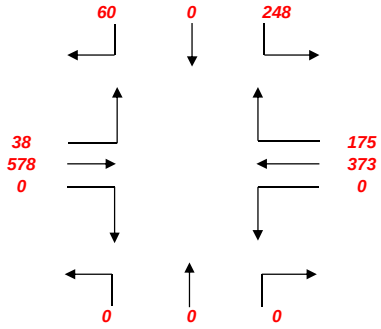


No Build Conditions

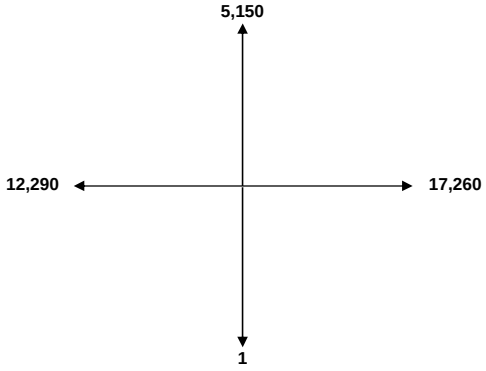
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

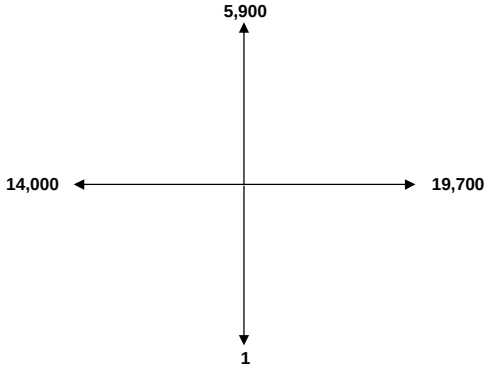
2016 Baseline Peak Hour Turning Movement Volumes (PM)



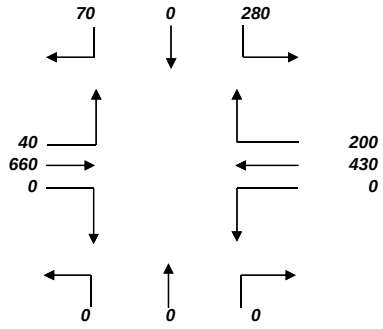
2016 Baseline ADTs



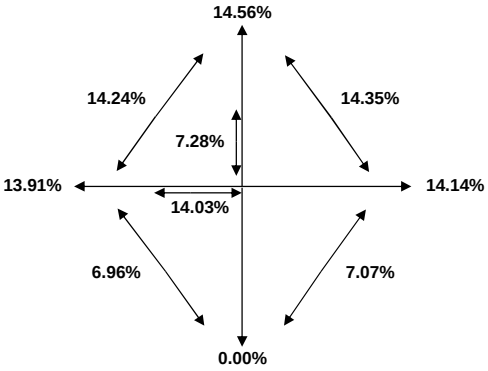
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

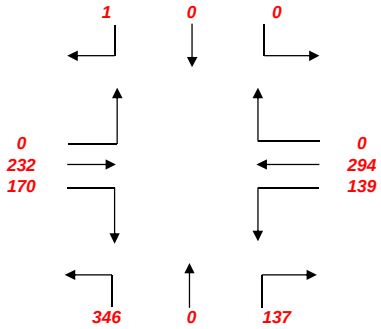


No Build Conditions

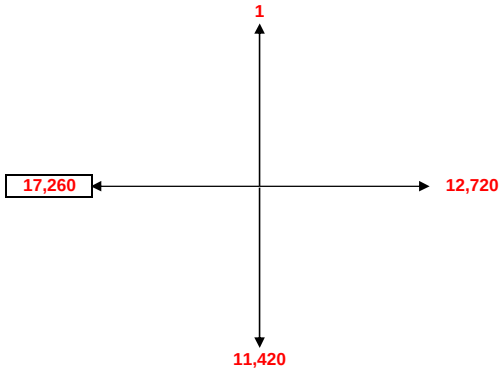
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

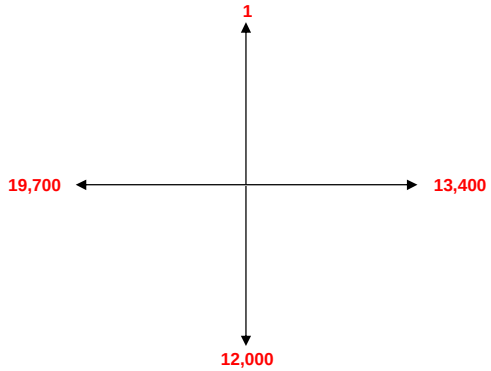
2016 Baseline Peak Hour Turning Movement Volumes (AM)



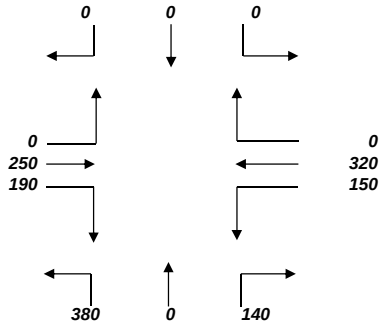
2016 Baseline ADTs



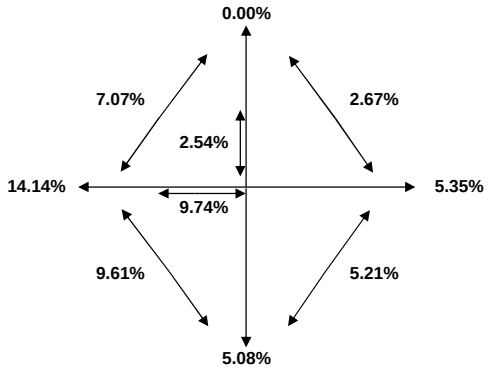
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

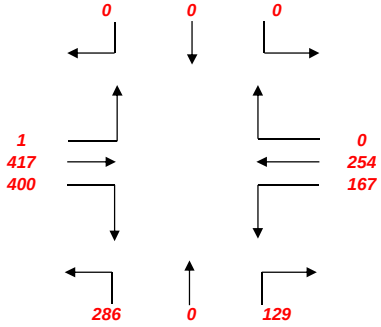


No Build Conditions

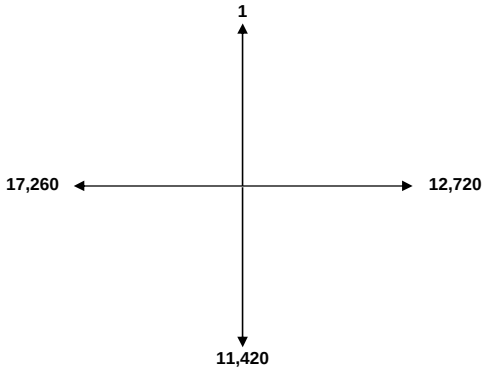
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

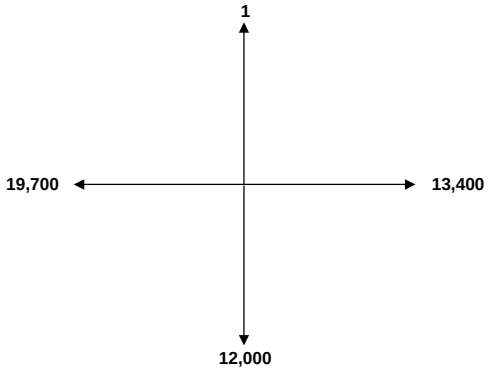
2016 Baseline Peak Hour Turning Movement Volumes (PM)



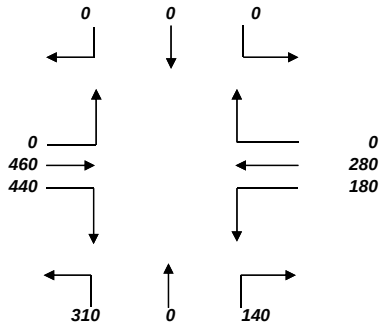
2016 Baseline ADTs



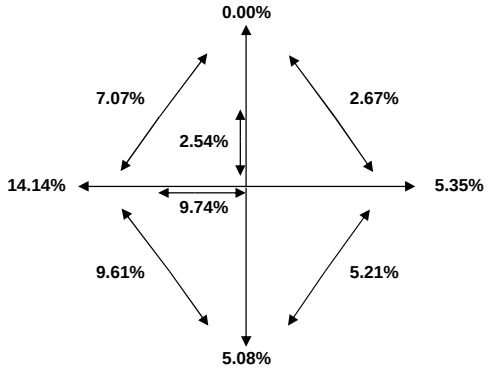
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

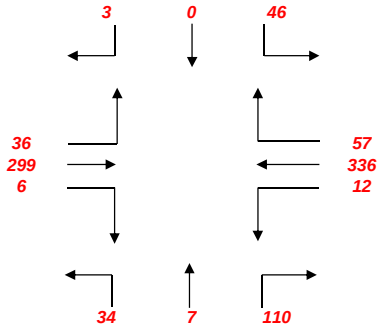


No Build Conditions

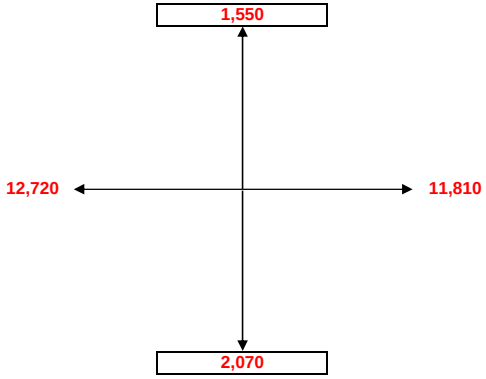
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

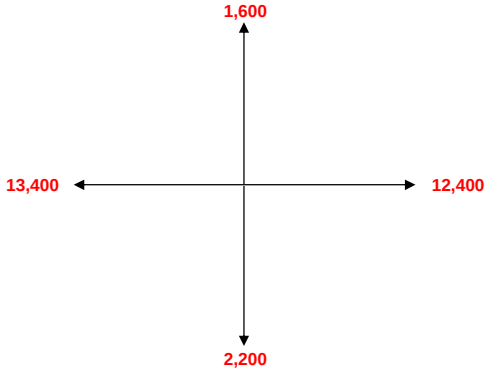
2016 Baseline Peak Hour Turning Movement Volumes (AM)



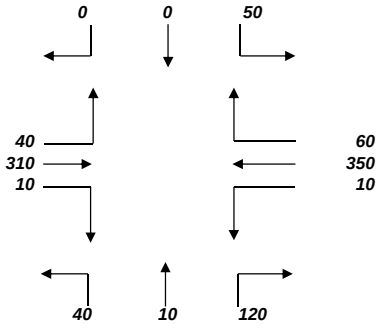
2016 Baseline ADTs



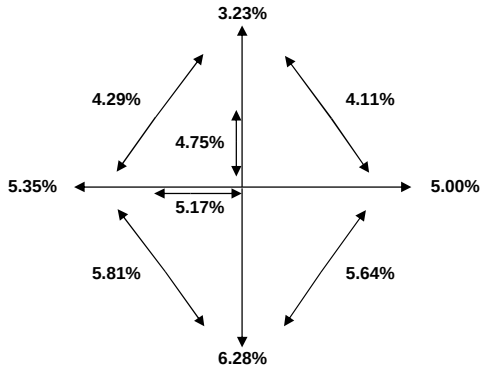
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

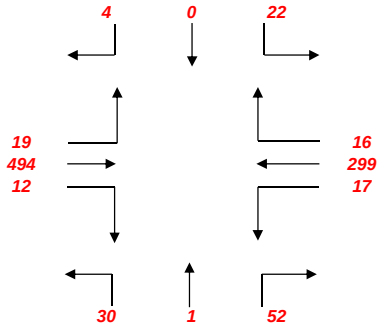


No Build Conditions

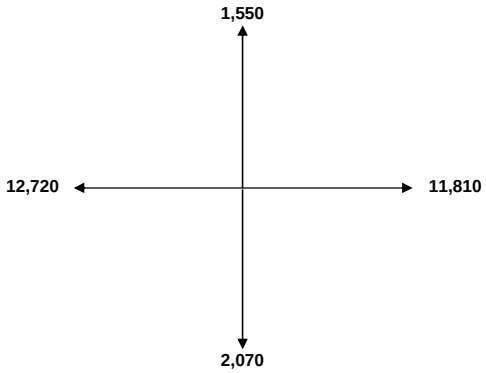
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

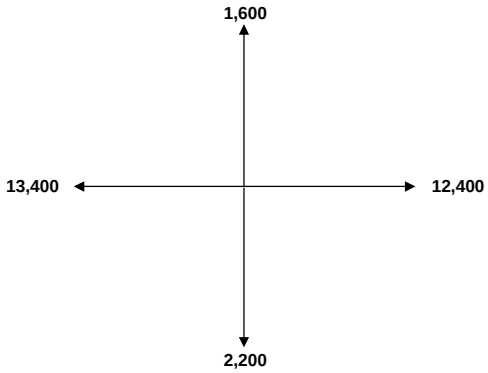
2016 Baseline Peak Hour Turning Movement Volumes (PM)



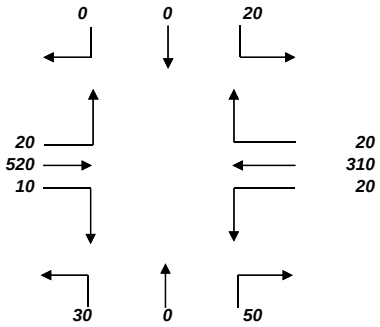
2016 Baseline ADTs



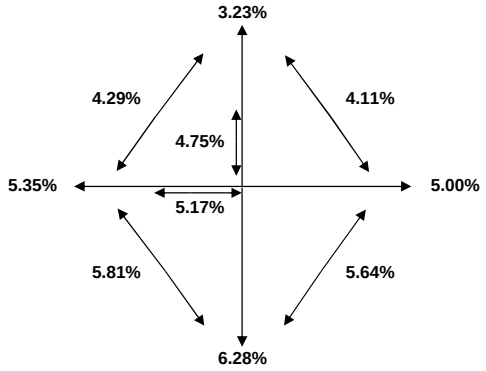
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

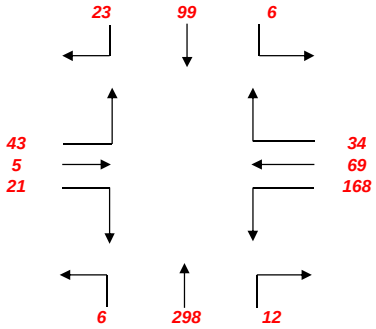


No Build Conditions

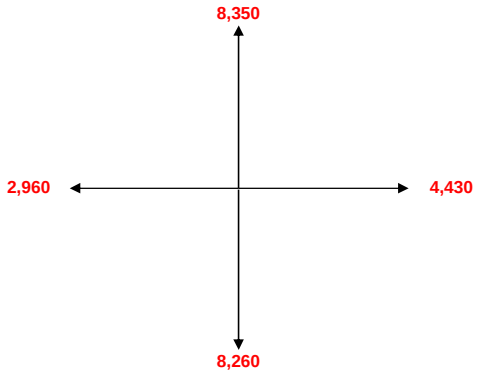
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

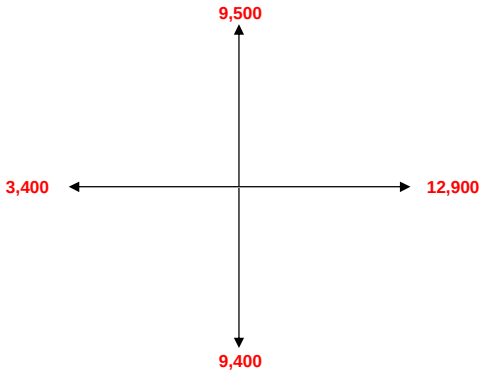
2016 Baseline Peak Hour Turning Movement Volumes (AM)



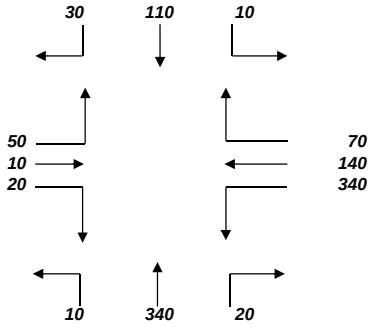
2016 Baseline ADTs



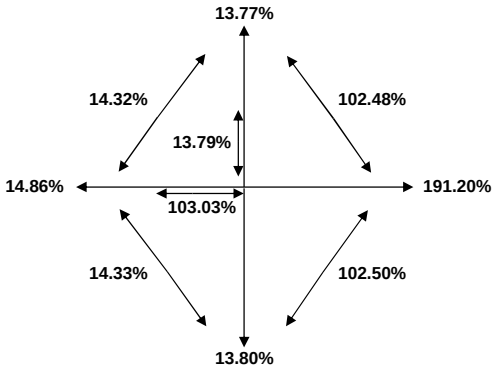
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

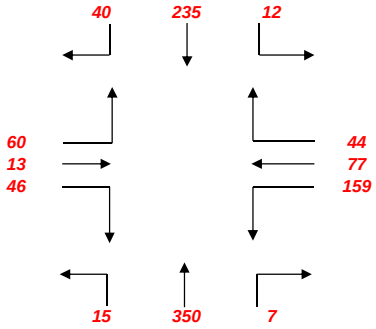


No Build Conditions

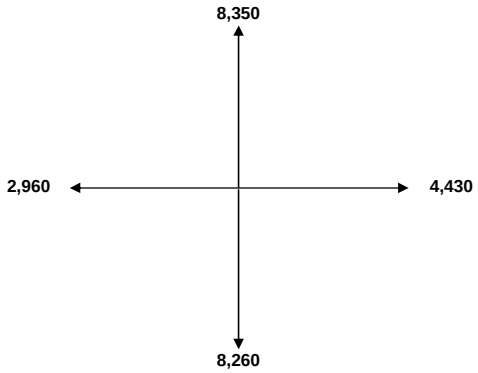
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

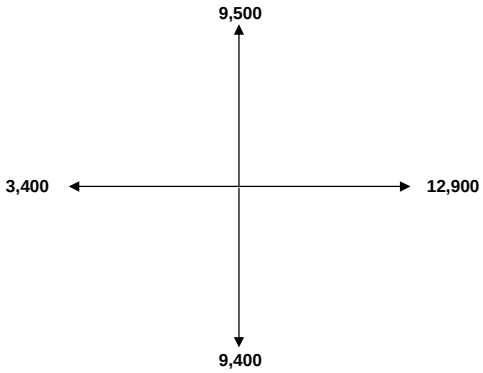
2016 Baseline Peak Hour Turning Movement Volumes (PM)



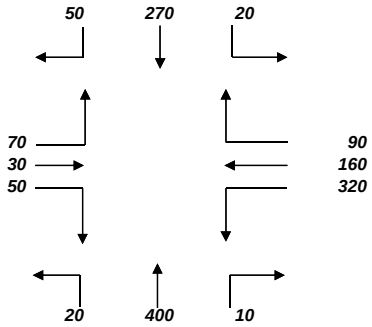
2016 Baseline ADTs



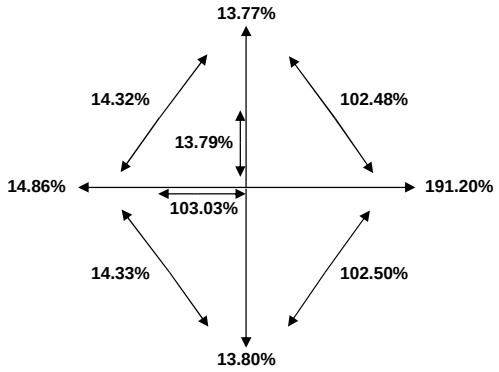
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

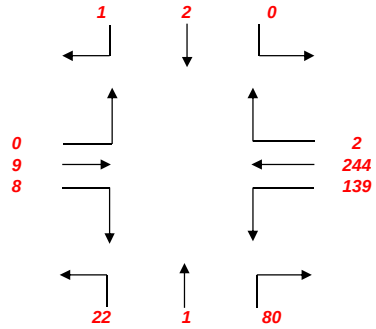


No Build Conditions

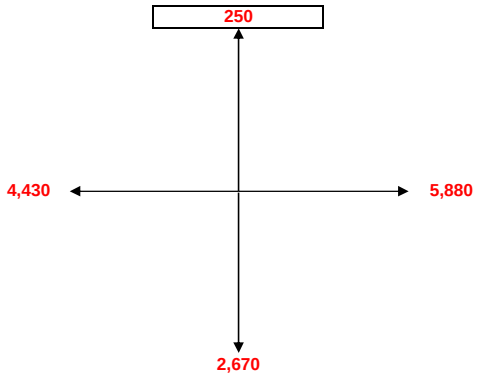
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

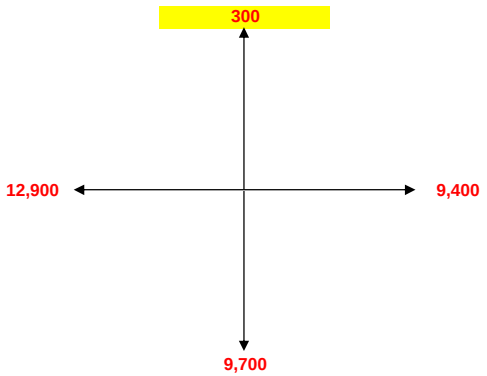
2016 Baseline Peak Hour Turning Movement Volumes (AM)



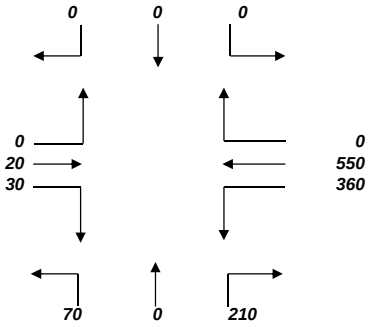
2016 Baseline ADTs



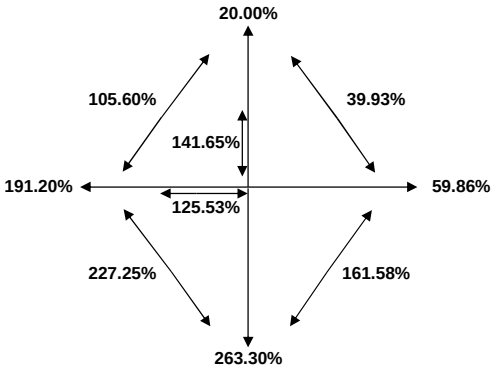
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

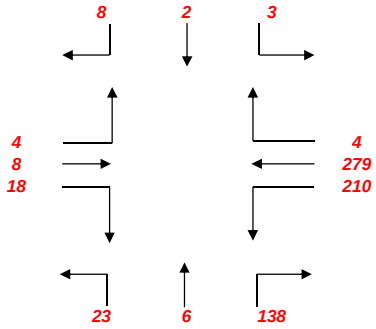


No Build Conditions

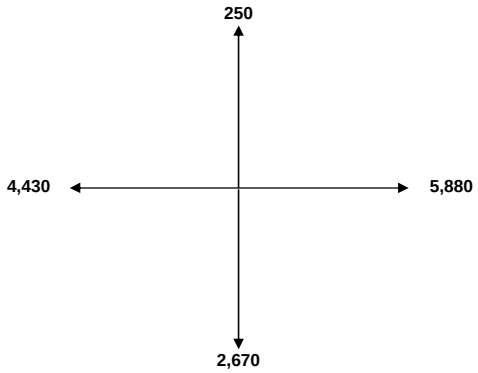
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

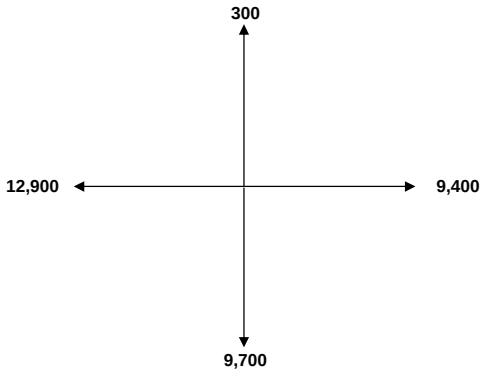
2016 Baseline Peak Hour Turning Movement Volumes (PM)



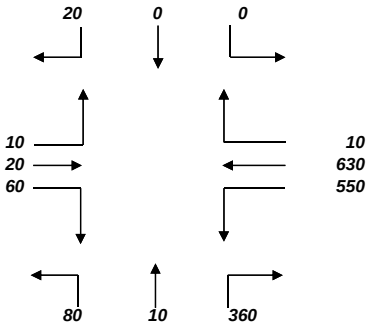
2016 Baseline ADTs



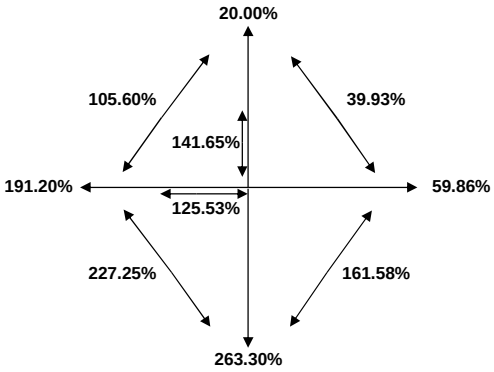
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

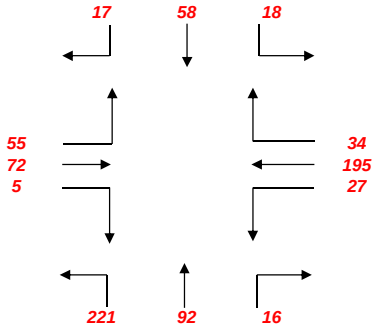


No Build Conditions

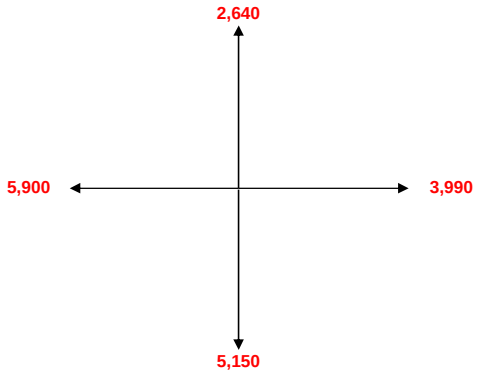
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

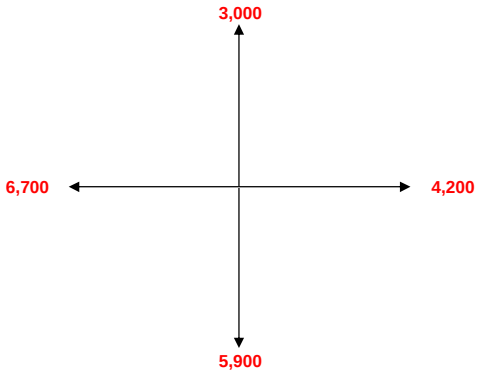
2016 Baseline Peak Hour Turning Movement Volumes (AM)



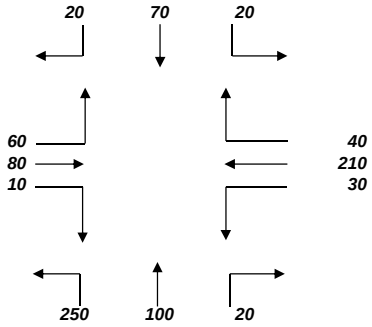
2016 Baseline ADTs



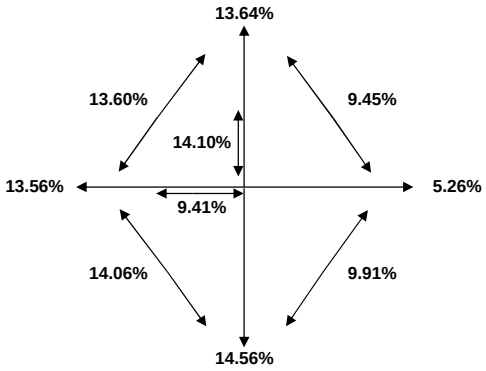
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

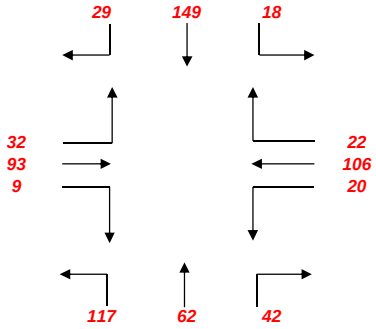


No Build Conditions

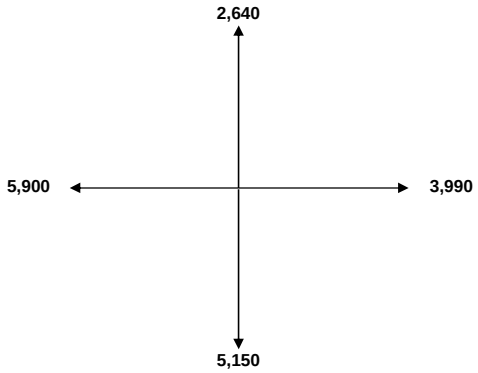
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

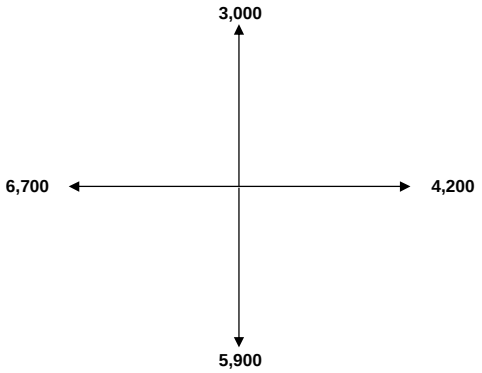
2016 Baseline Peak Hour Turning Movement Volumes (PM)



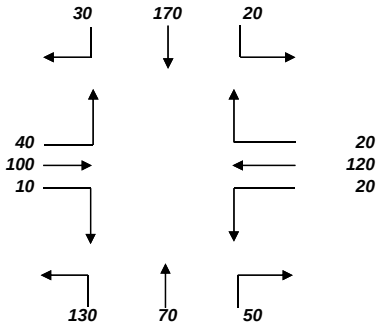
2016 Baseline ADTs



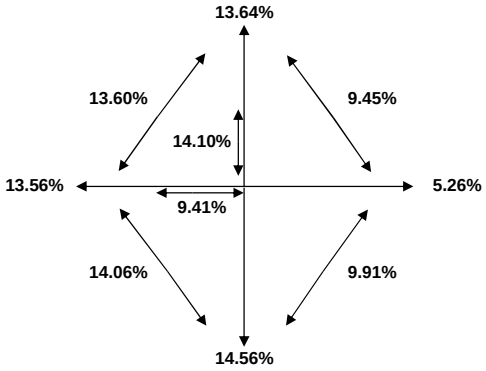
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

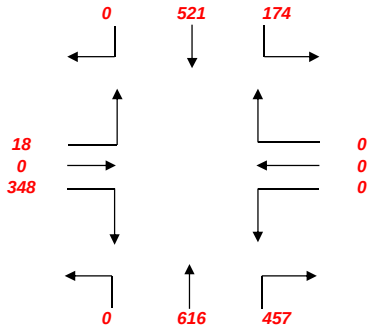


No Build Conditions

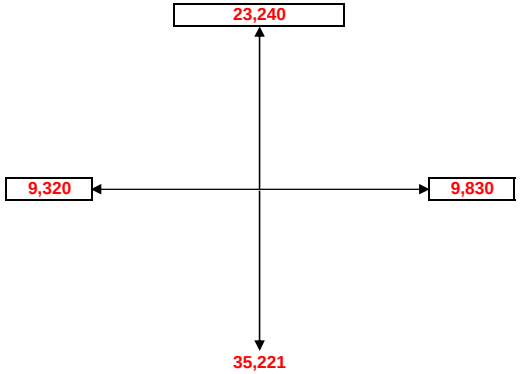
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

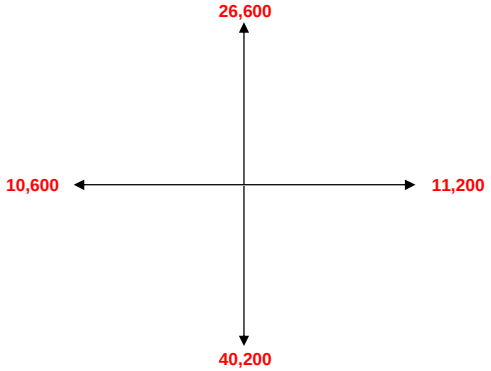
2016 Baseline Peak Hour Turning Movement Volumes (AM)



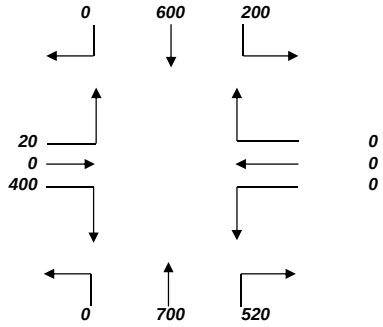
2016 Baseline ADTs



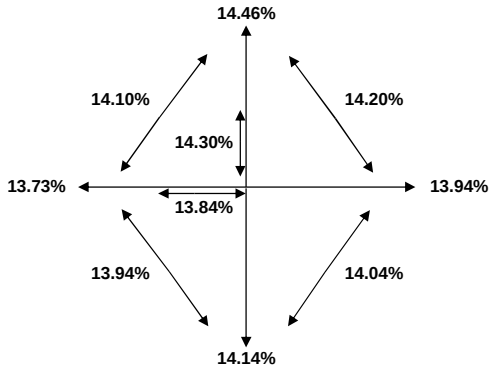
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

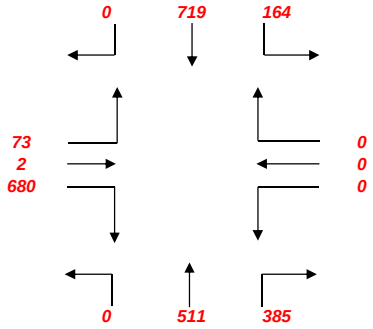


No Build Conditions

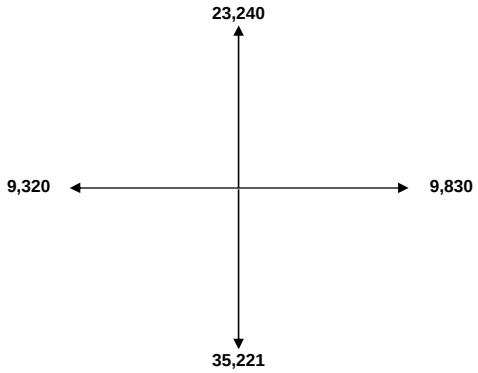
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

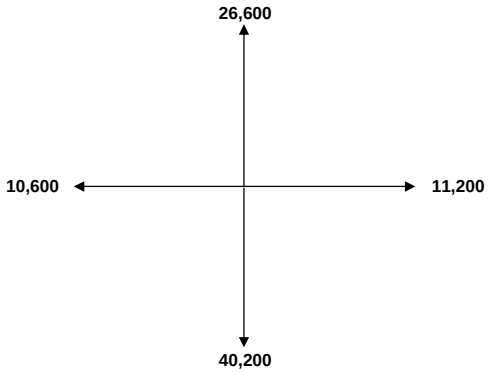
2016 Baseline Peak Hour Turning Movement Volumes (PM)



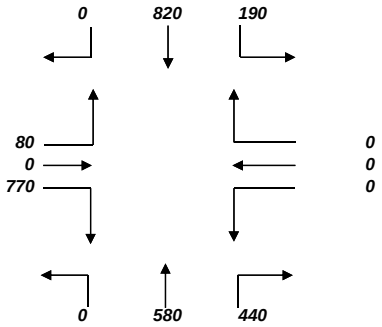
2016 Baseline ADTs



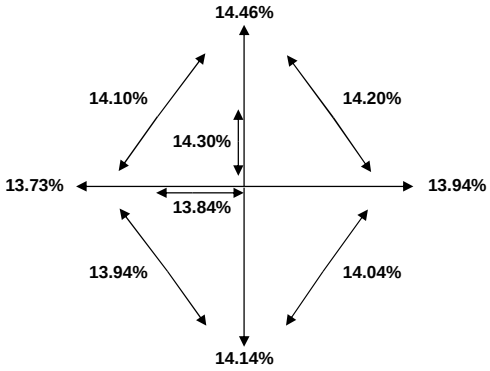
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

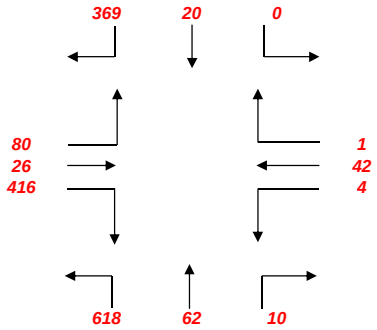


No Build Conditions

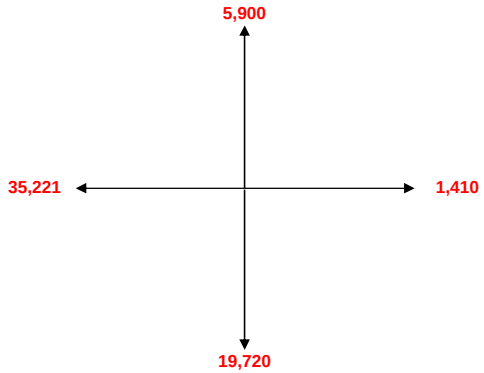
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove Way

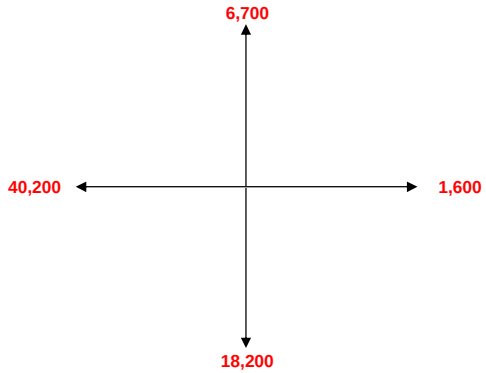
2016 Baseline Peak Hour Turning Movement Volumes (AM)



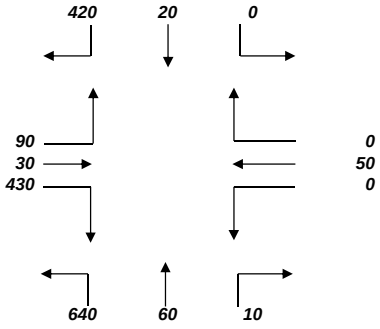
2016 Baseline ADTs



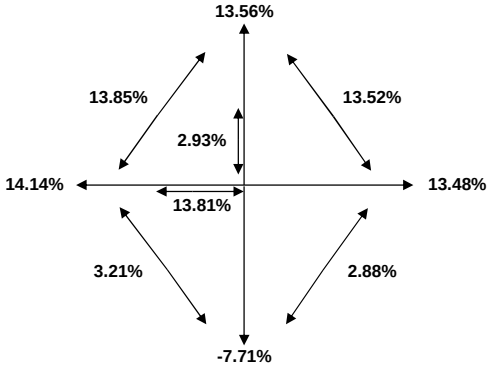
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

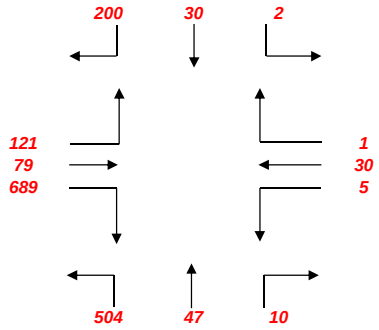


No Build Conditions

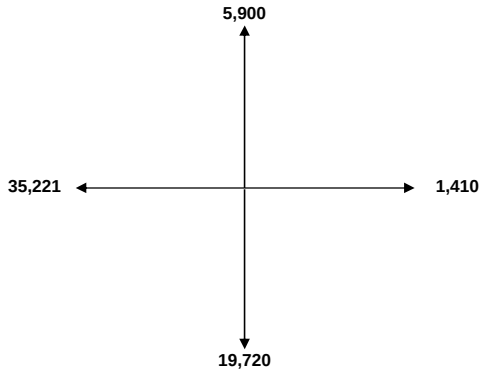
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove W

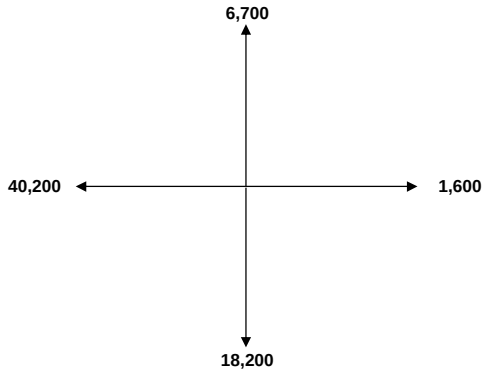
2016 Baseline Peak Hour Turning Movement Volumes (PM)



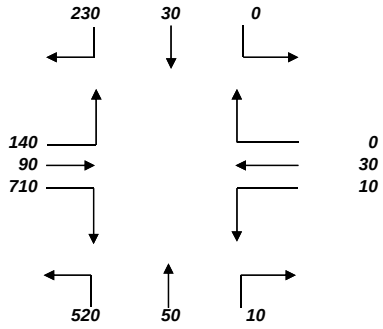
2016 Baseline ADTs



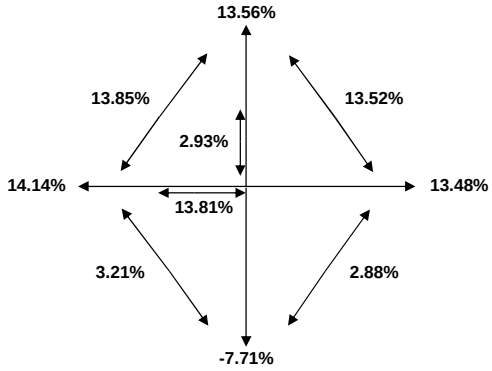
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

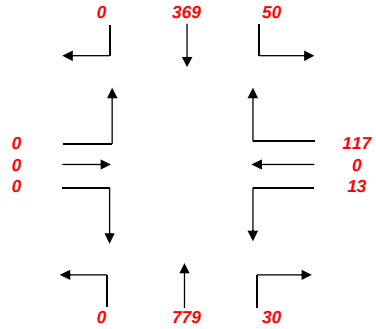


No Build Conditions

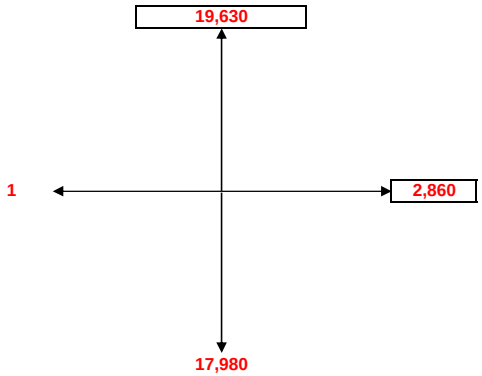
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

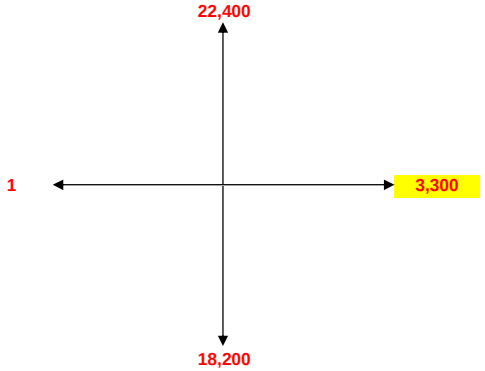
2016 Baseline Peak Hour Turning Movement Volumes (AM)



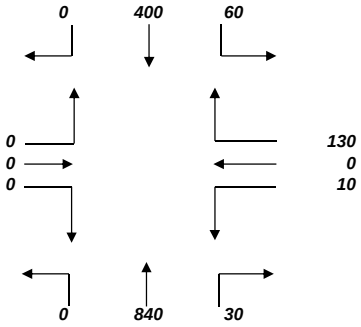
2016 Baseline ADTs



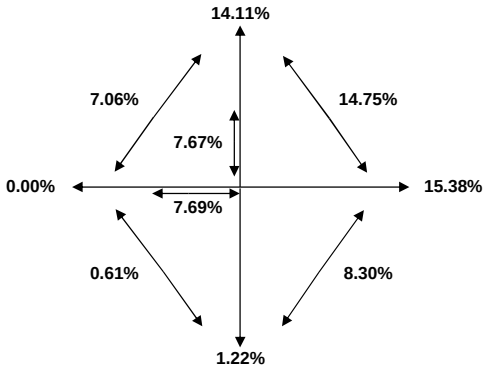
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

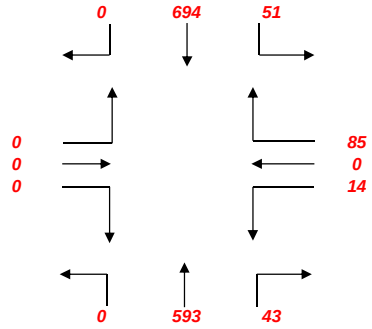


No Build Conditions

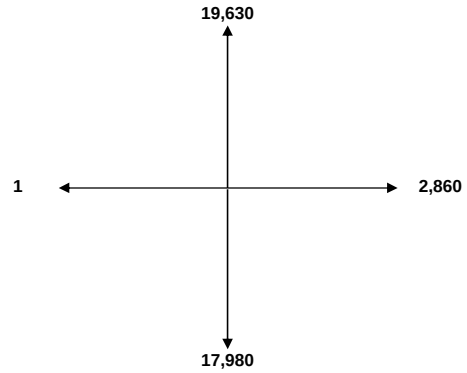
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

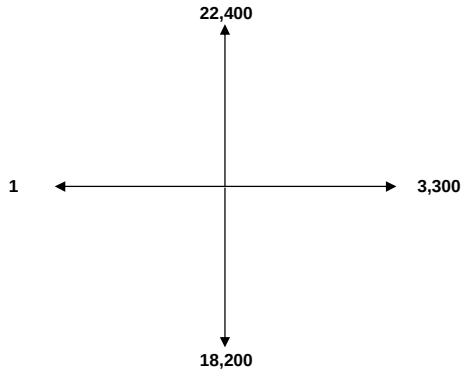
2016 Baseline Peak Hour Turning Movement Volumes (PM)



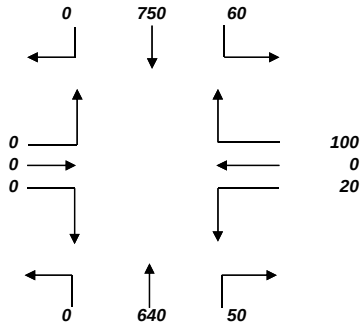
2016 Baseline ADTs



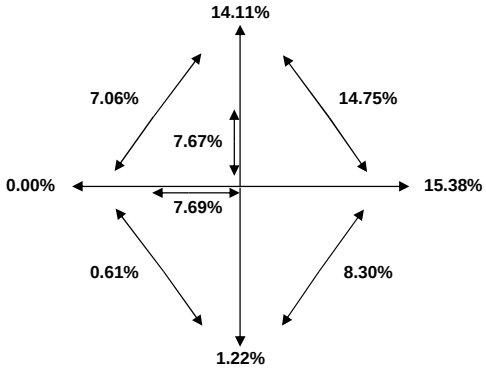
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

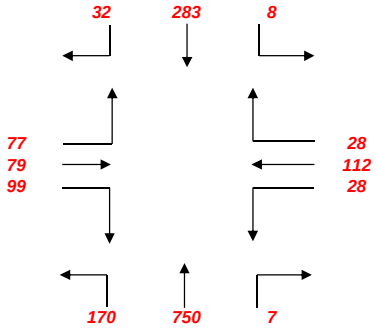


No Build Conditions

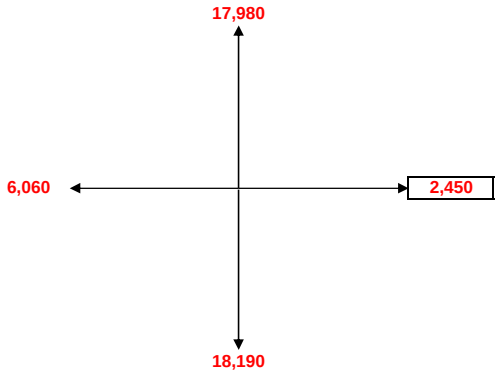
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

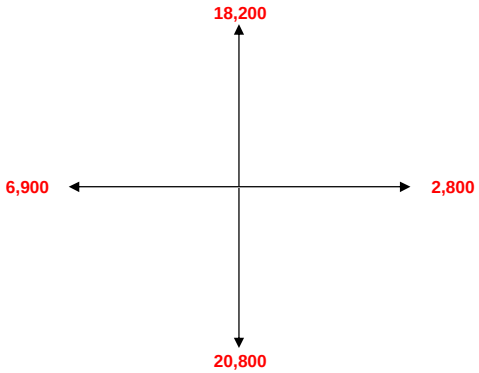
2016 Baseline Peak Hour Turning Movement Volumes (AM)



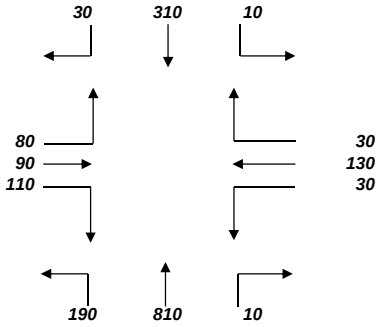
2016 Baseline ADTs



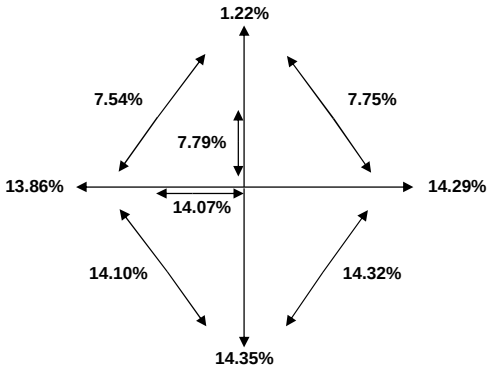
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

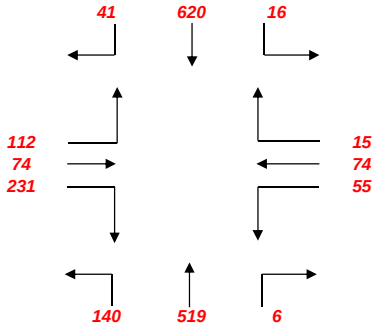


No Build Conditions

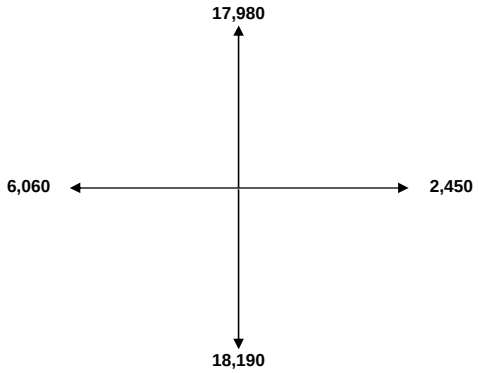
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

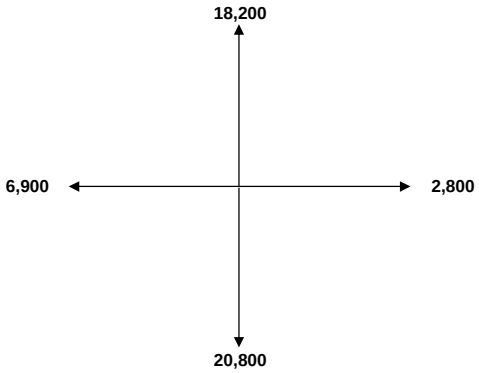
2016 Baseline Peak Hour Turning Movement Volumes (PM)



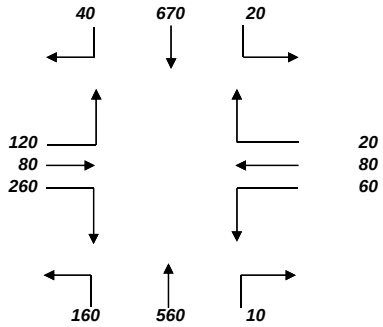
2016 Baseline ADTs



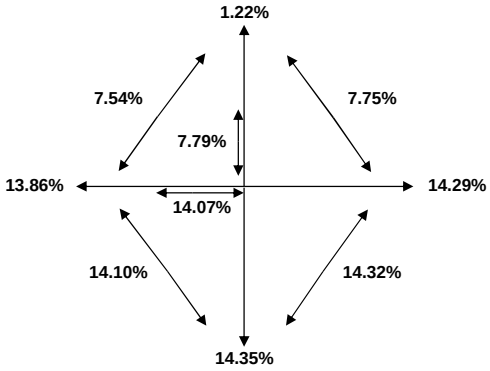
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

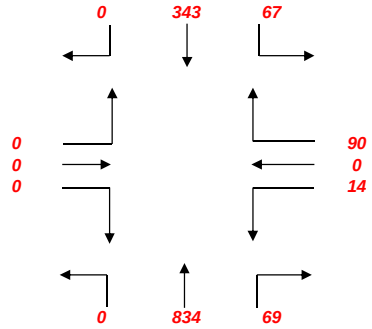


No Build Conditions

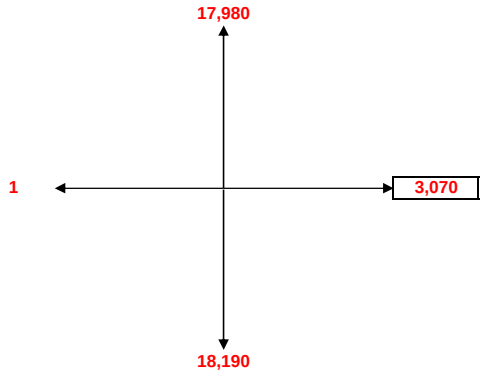
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

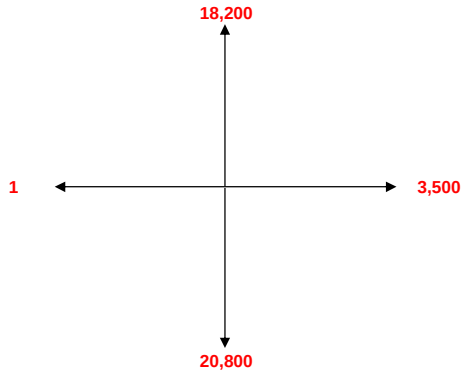
2016 Baseline Peak Hour Turning Movement Volumes (AM)



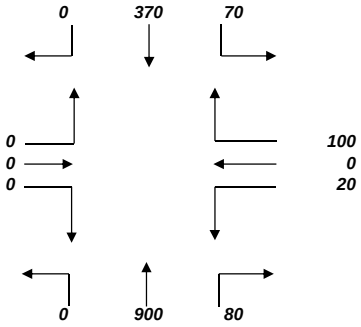
2016 Baseline ADTs



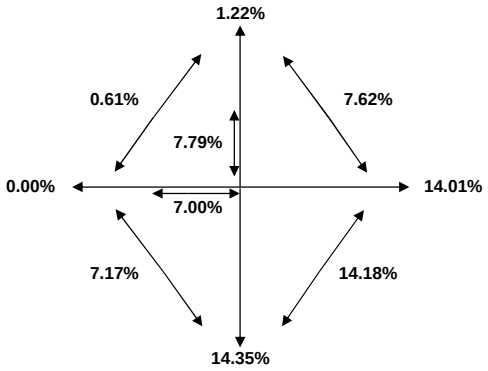
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

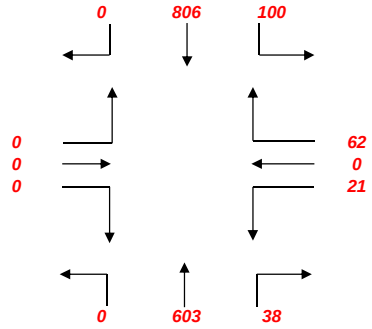


No Build Conditions

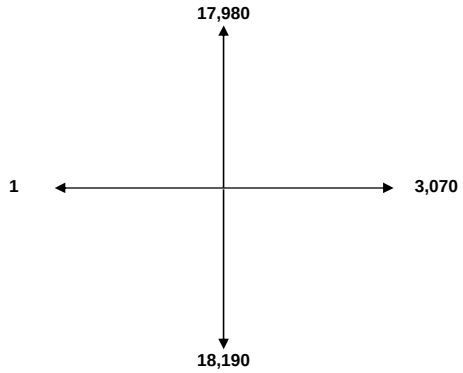
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

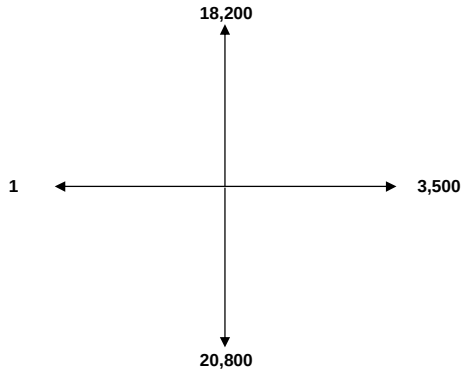
2016 Baseline Peak Hour Turning Movement Volumes (PM)



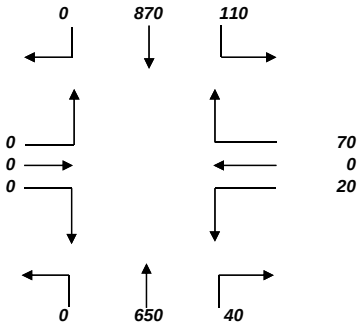
2016 Baseline ADTs



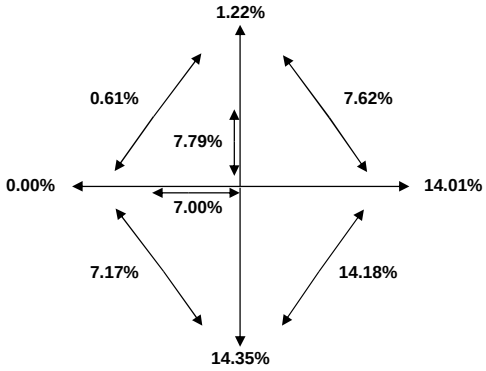
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

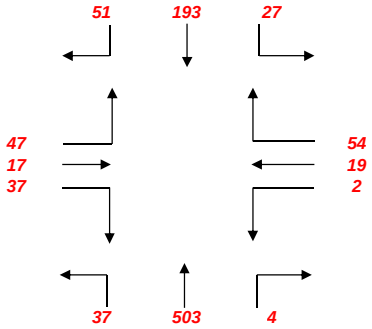


No Build Conditions

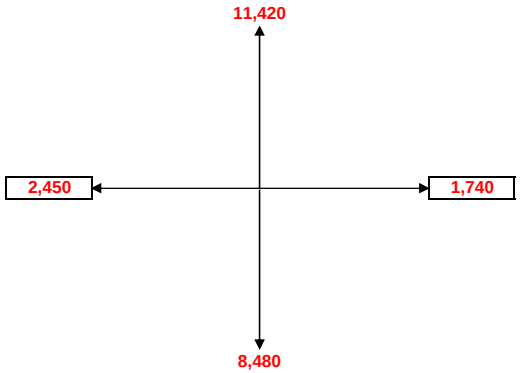
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

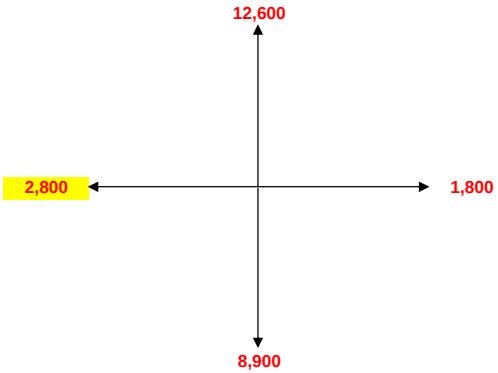
2016 Baseline Peak Hour Turning Movement Volumes (AM)



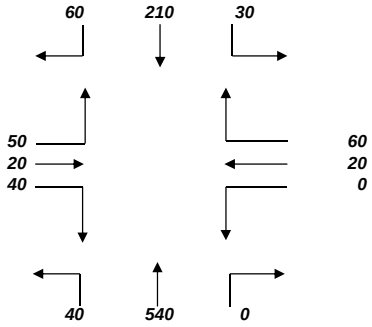
2016 Baseline ADTs



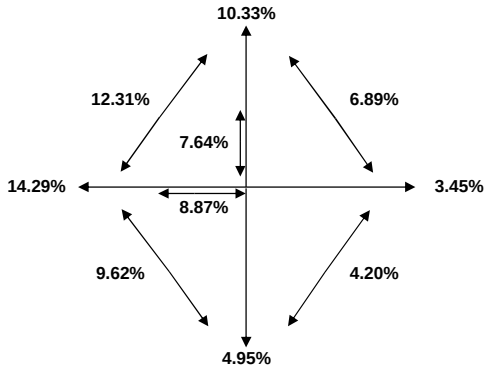
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

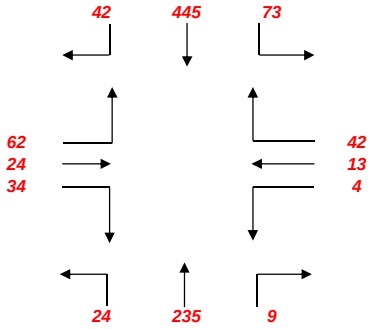


No Build Conditions

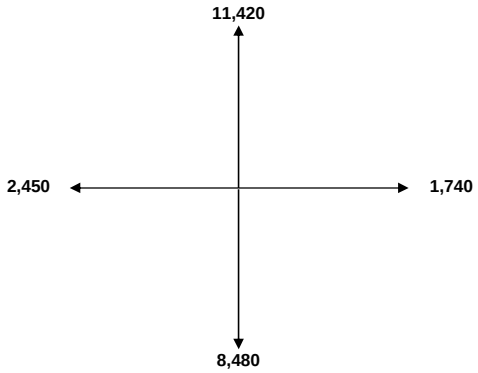
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

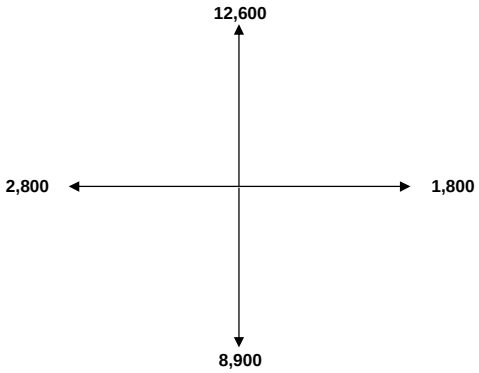
2016 Baseline Peak Hour Turning Movement Volumes (PM)



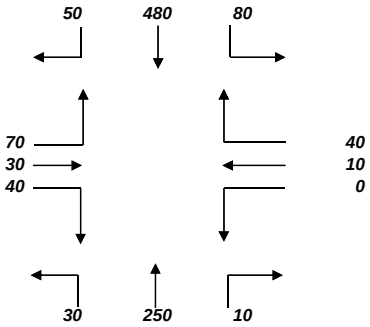
2016 Baseline ADTs



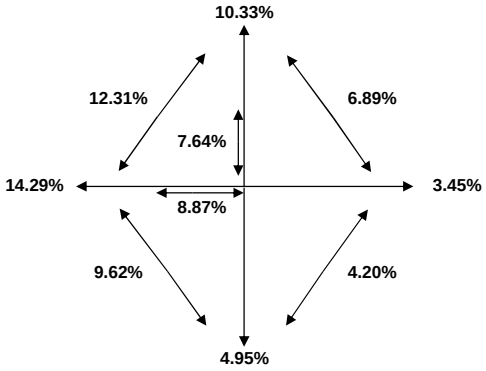
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

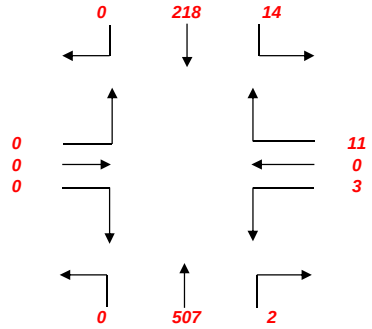


No Build Conditions

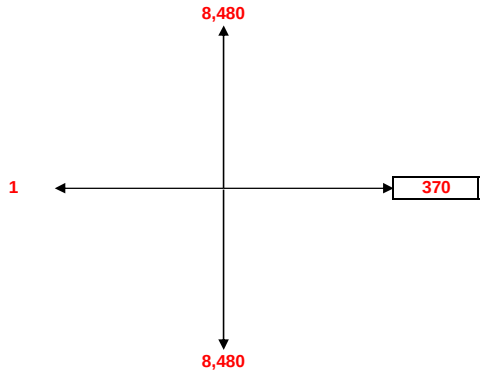
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

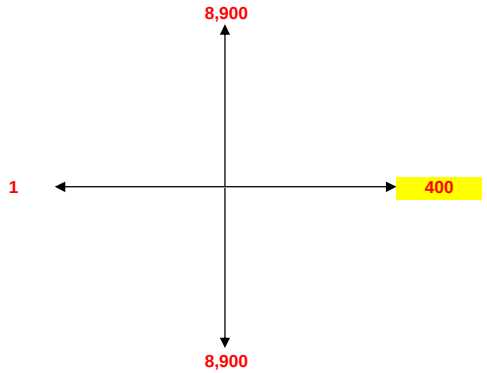
2016 Baseline Peak Hour Turning Movement Volumes (AM)



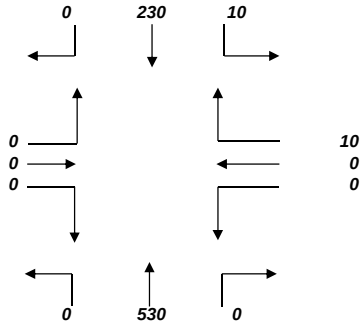
2016 Baseline ADTs



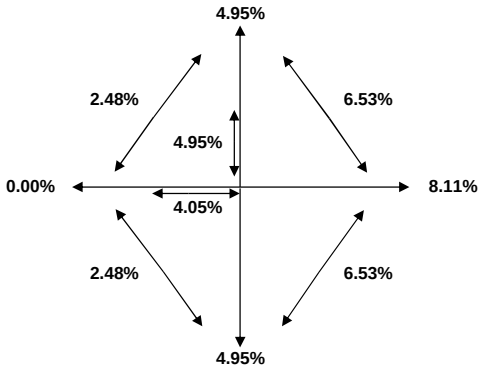
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

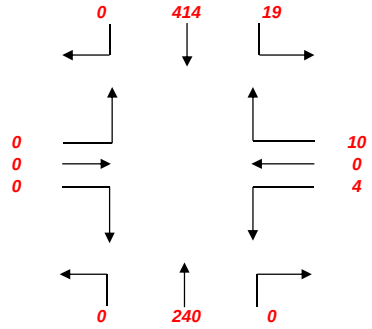


No Build Conditions

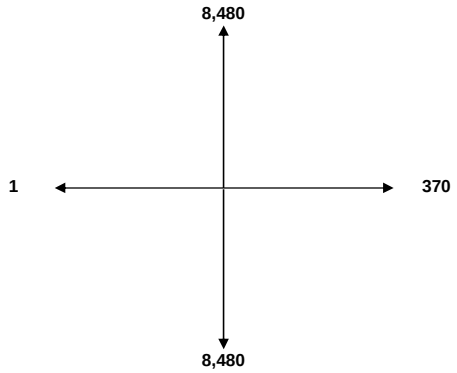
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

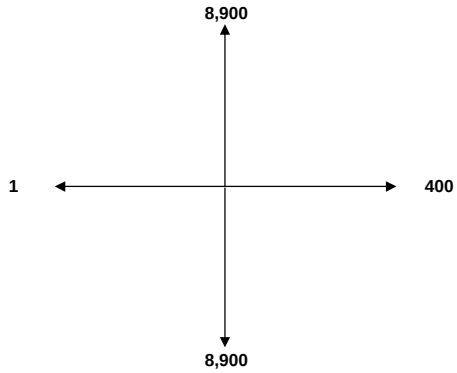
2016 Baseline Peak Hour Turning Movement Volumes (PM)



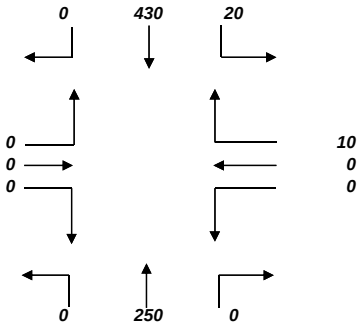
2016 Baseline ADTs



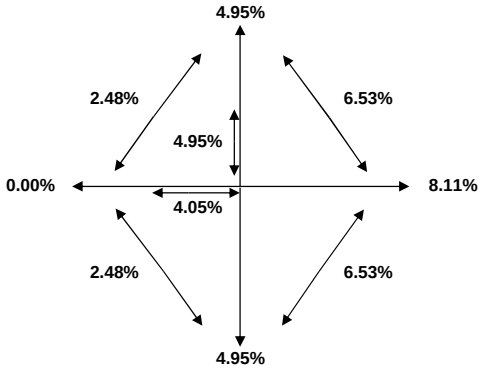
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

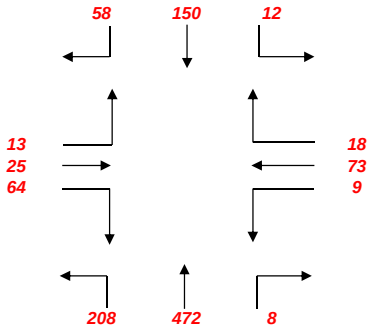


No Build Conditions

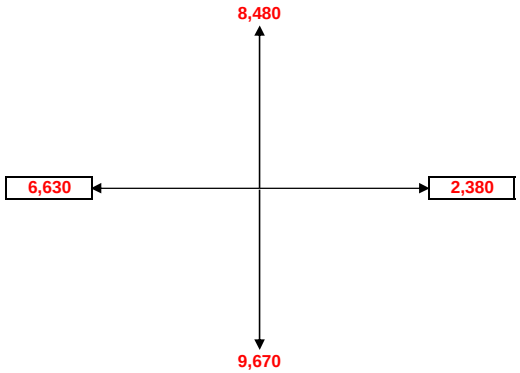
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

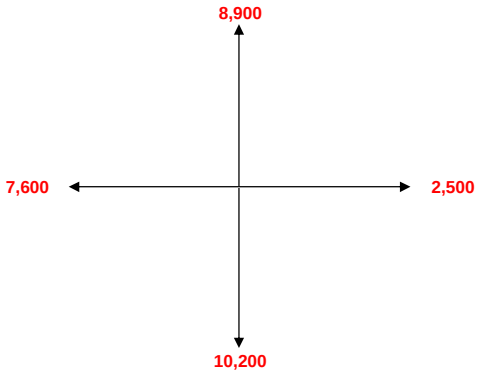
2016 Baseline Peak Hour Turning Movement Volumes (AM)



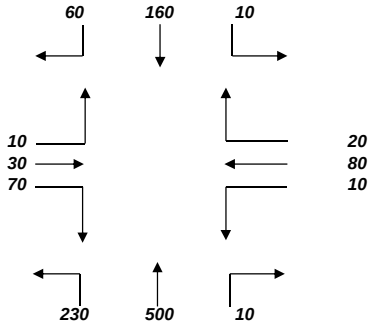
2016 Baseline ADTs



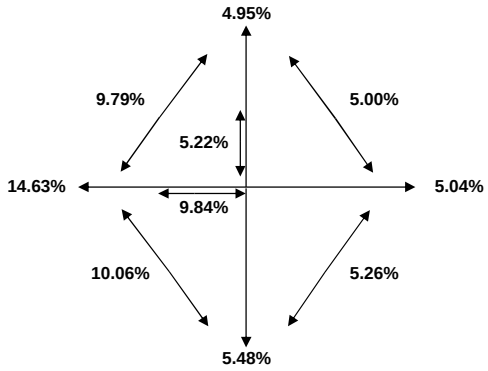
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

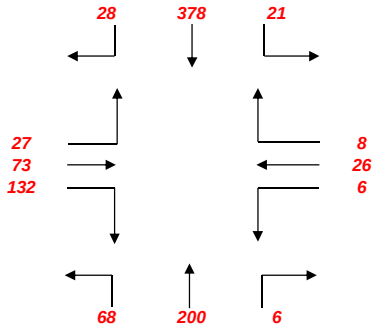


No Build Conditions

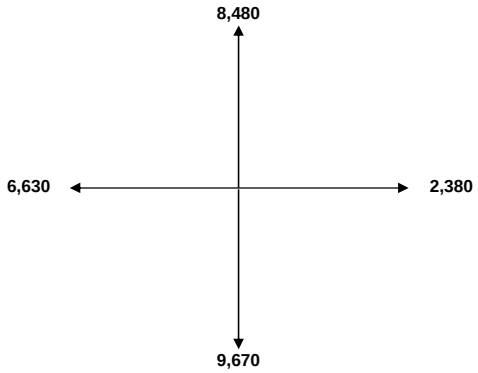
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

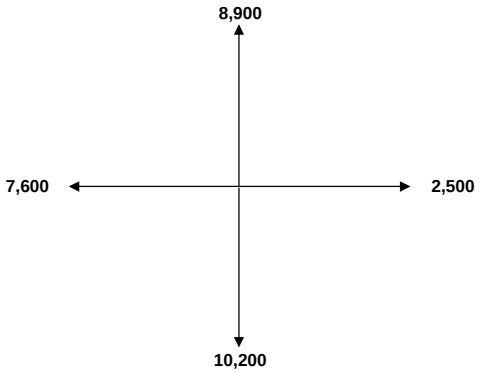
2016 Baseline Peak Hour Turning Movement Volumes (PM)



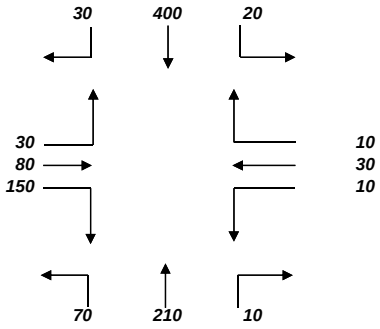
2016 Baseline ADTs



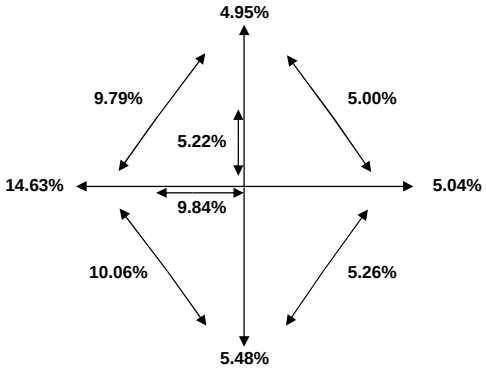
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

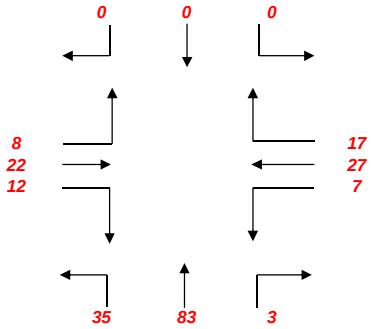


No Build Conditions

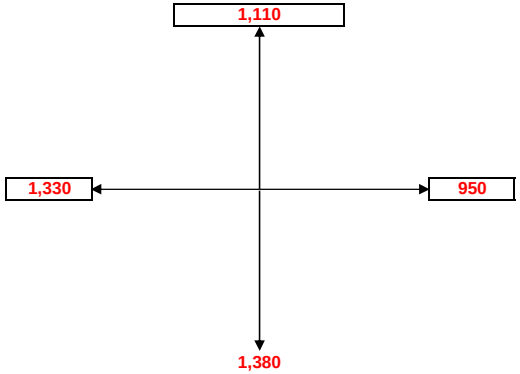
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

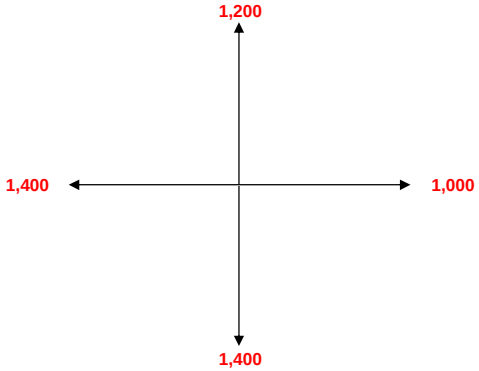
2016 Baseline Peak Hour Turning Movement Volumes (AM)



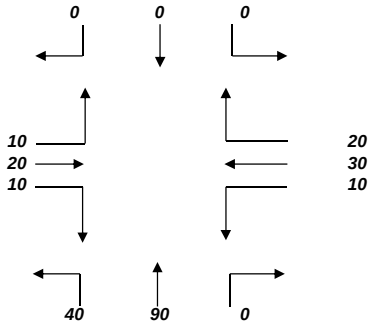
2016 Baseline ADTs



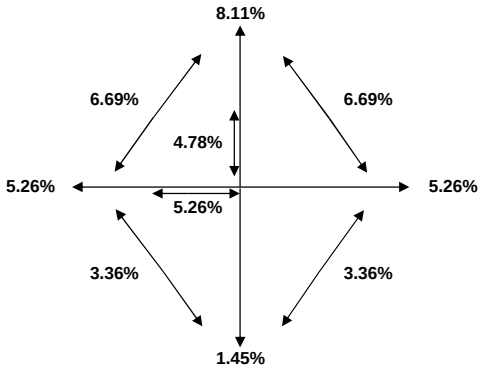
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

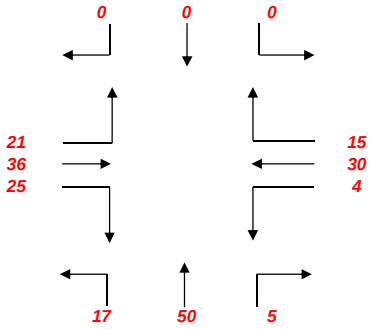


No Build Conditions

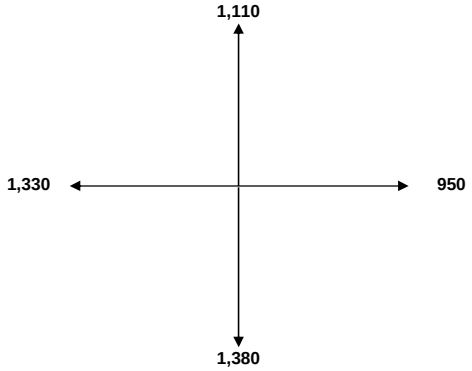
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

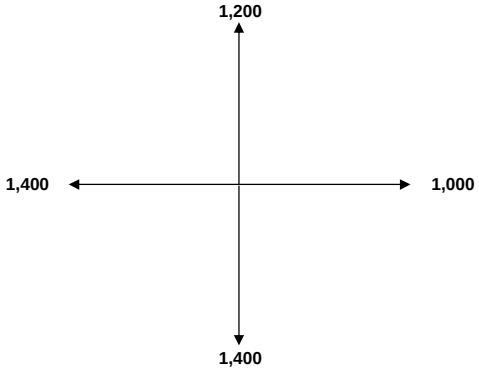
2016 Baseline Peak Hour Turning Movement Volumes (PM)



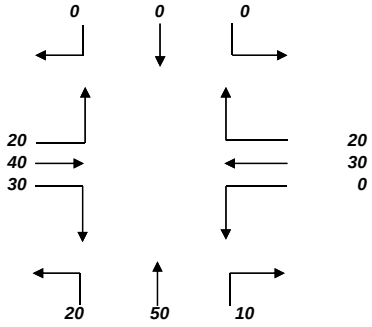
2016 Baseline ADTs



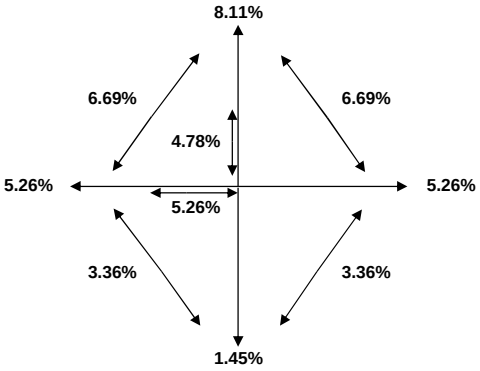
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

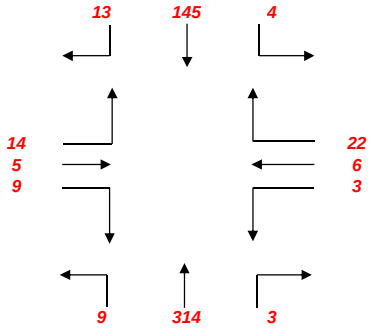


No Build Conditions

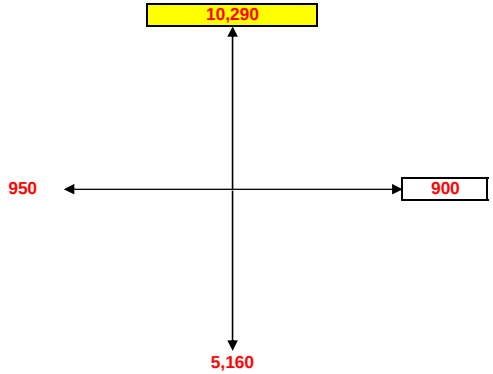
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

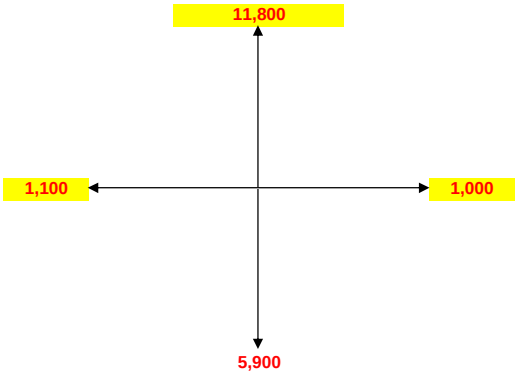
2016 Baseline Peak Hour Turning Movement Volumes (AM)



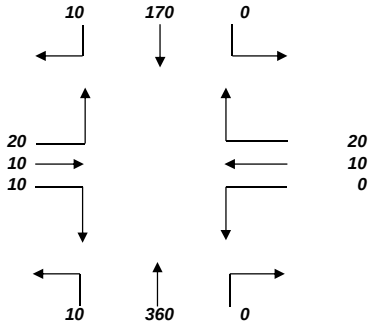
2016 Baseline ADTs



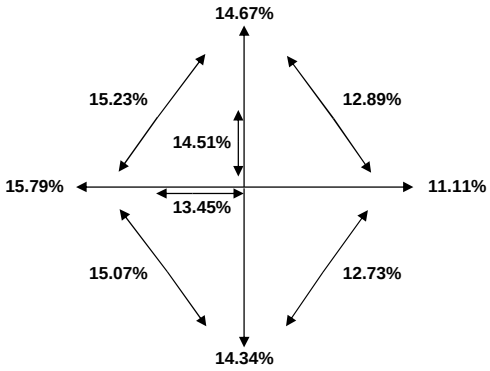
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

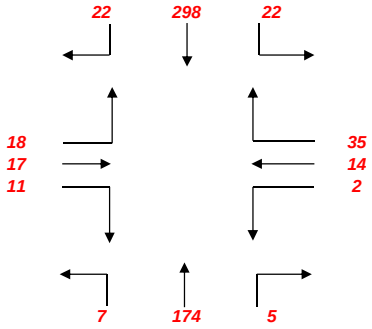


No Build Conditions

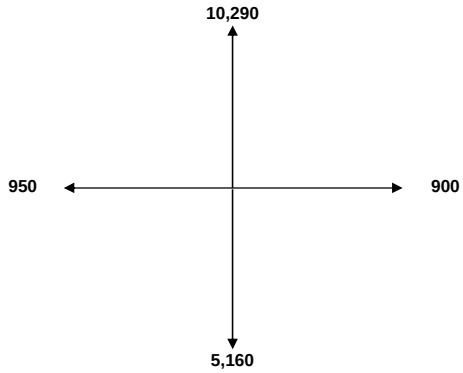
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

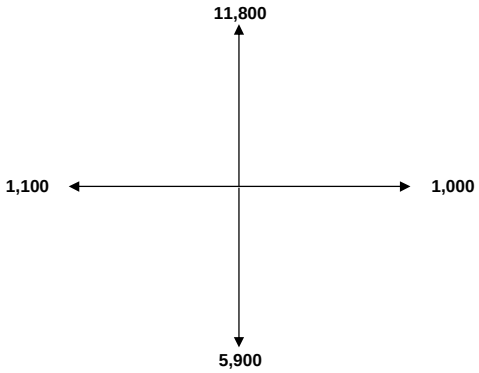
2016 Baseline Peak Hour Turning Movement Volumes (PM)



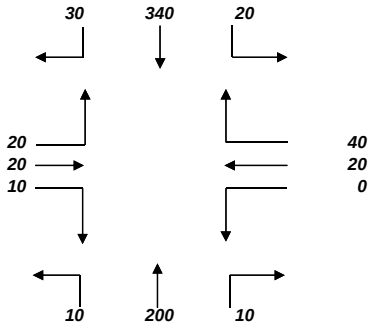
2016 Baseline ADTs



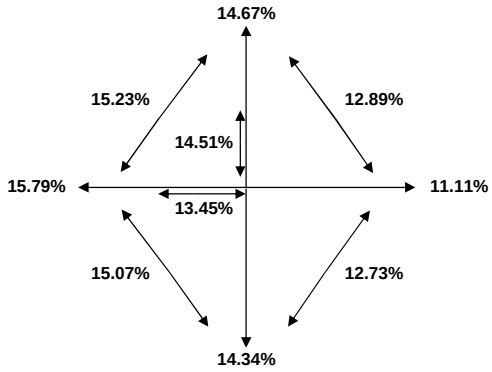
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

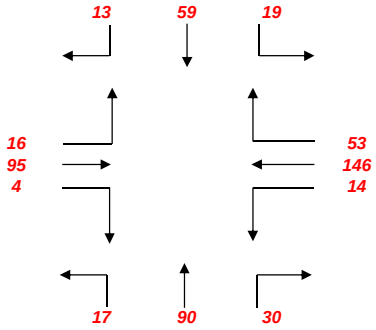


No Build Conditions

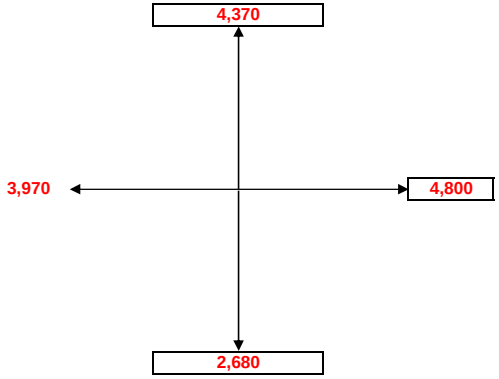
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

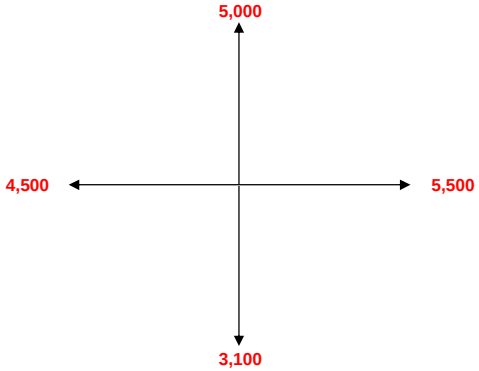
2016 Baseline Peak Hour Turning Movement Volumes (AM)



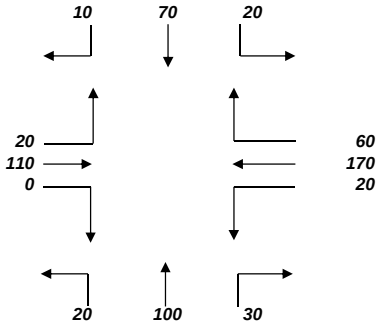
2016 Baseline ADTs



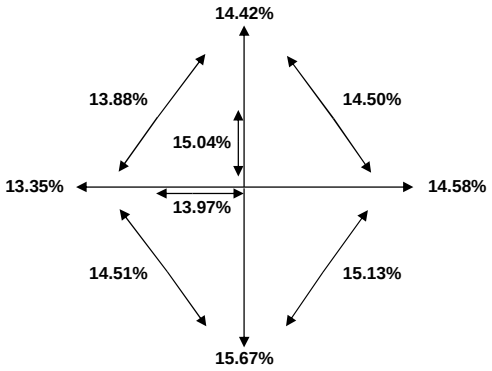
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

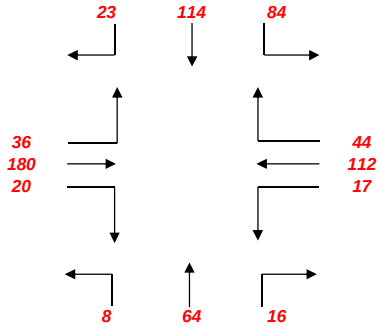


No Build Conditions

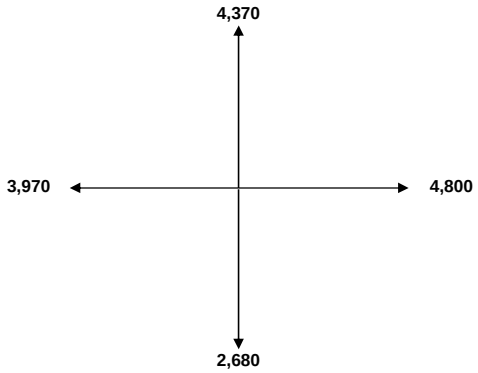
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

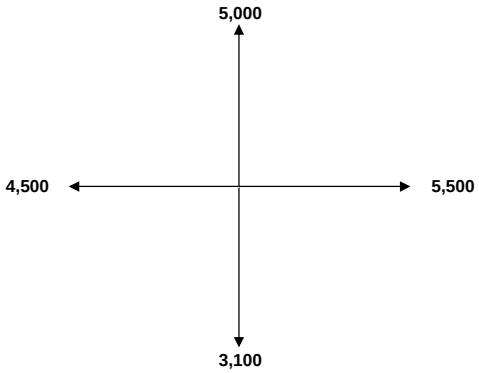
2016 Baseline Peak Hour Turning Movement Volumes (PM)



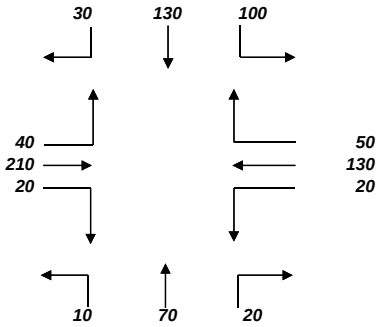
2016 Baseline ADTs



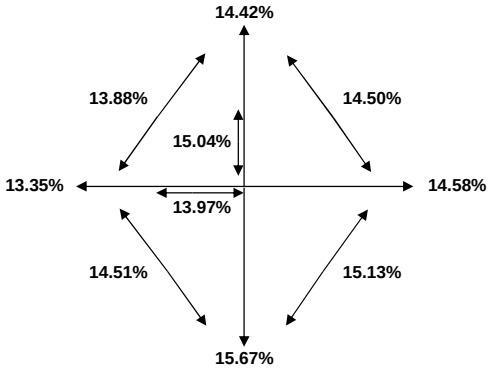
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

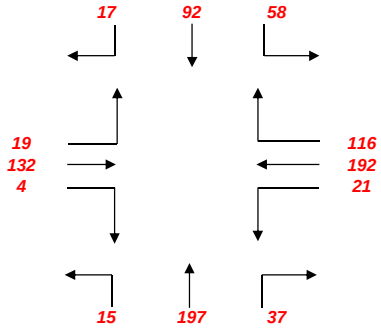


No Build Conditions

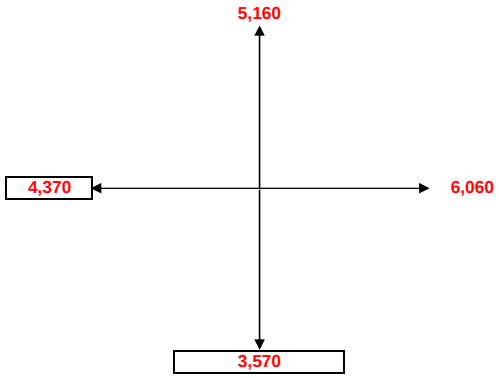
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

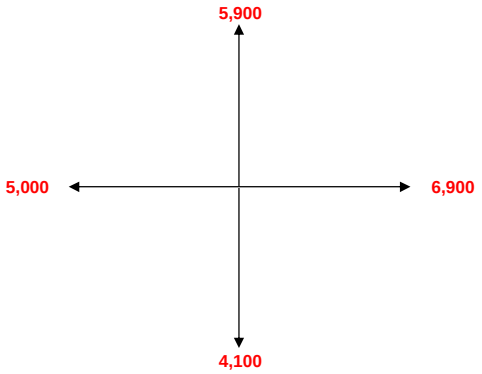
2016 Baseline Peak Hour Turning Movement Volumes (AM)



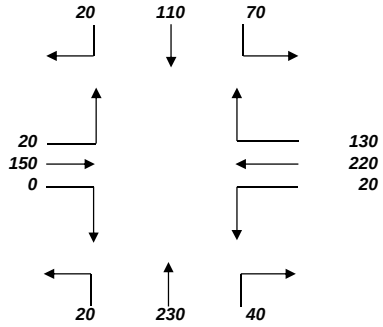
2016 Baseline ADTs



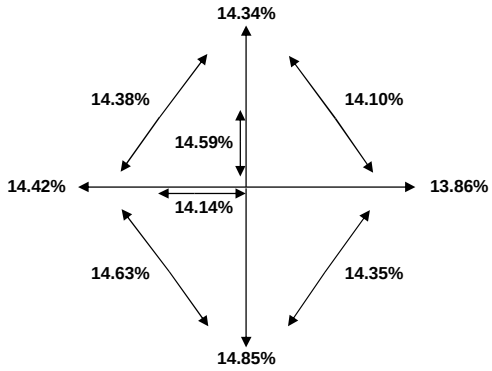
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

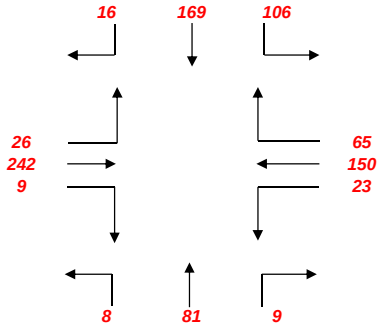


No Build Conditions

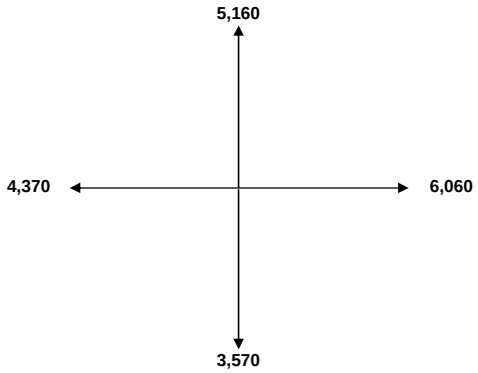
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

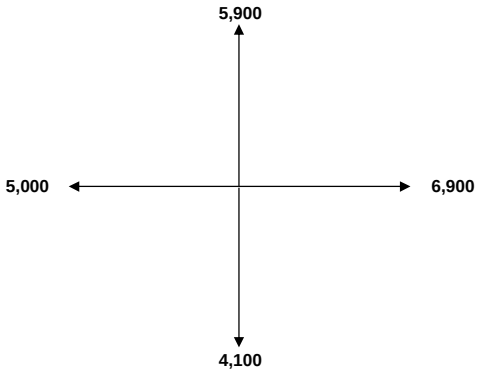
2016 Baseline Peak Hour Turning Movement Volumes (PM)



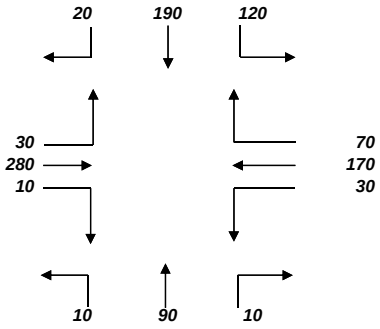
2016 Baseline ADTs



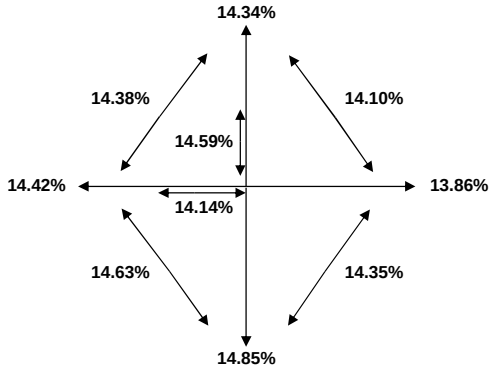
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

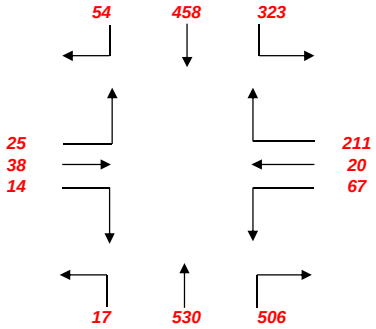


No Build Conditions

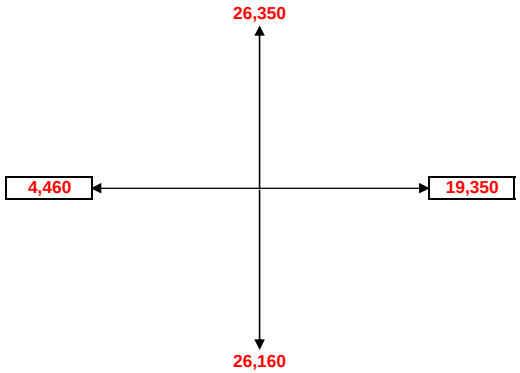
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbound Ramps

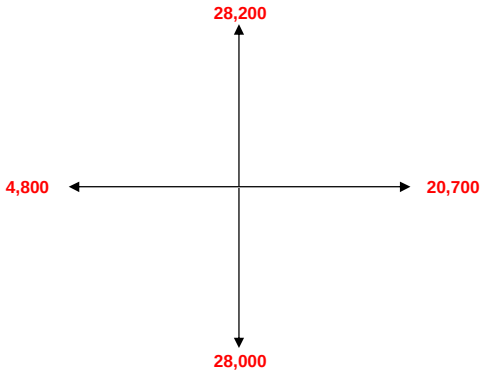
2016 Baseline Peak Hour Turning Movement Volumes (AM)



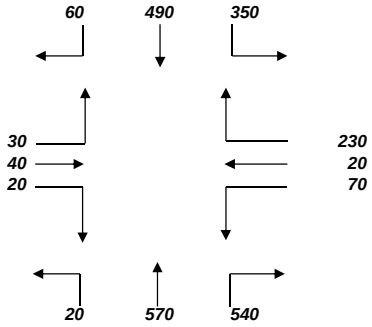
2016 Baseline ADTs



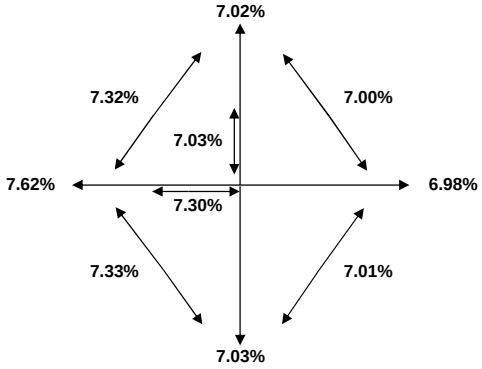
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

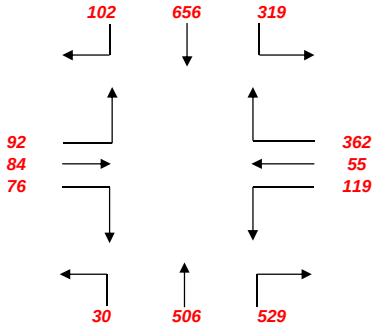


No Build Conditions

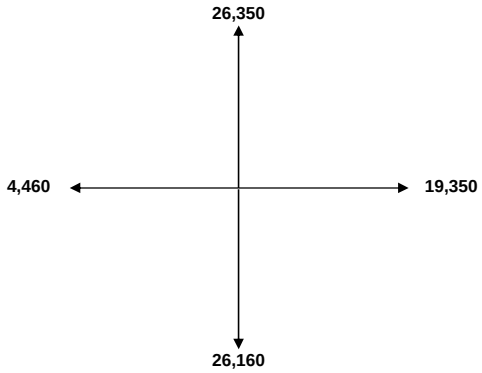
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbo

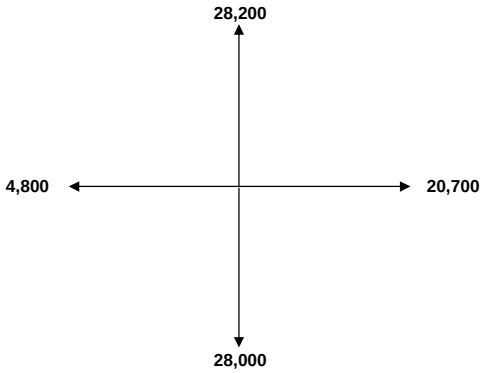
2016 Baseline Peak Hour Turning Movement Volumes (PM)



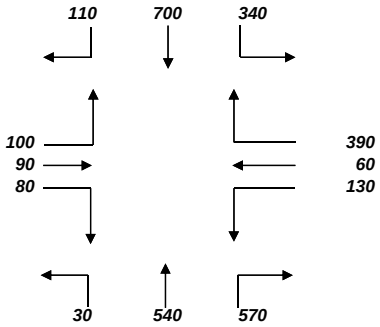
2016 Baseline ADTs



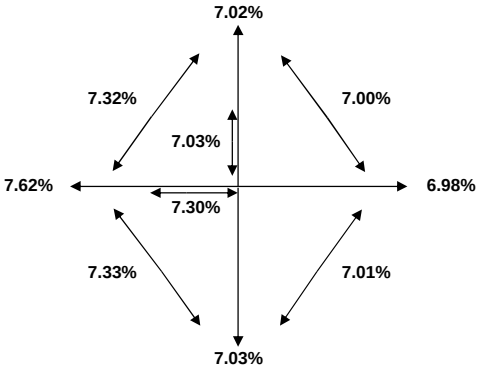
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

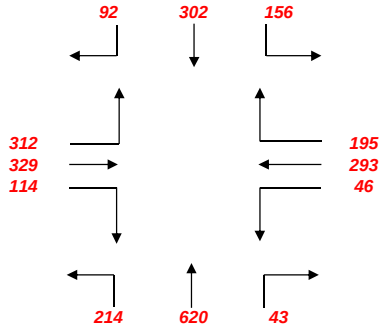


No Build Conditions

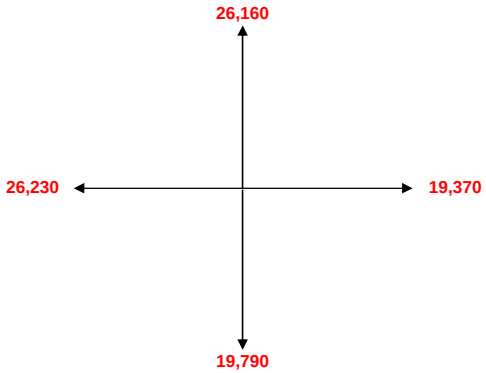
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

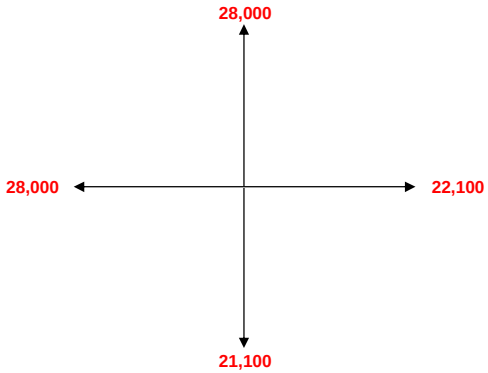
2016 Baseline Peak Hour Turning Movement Volumes (AM)



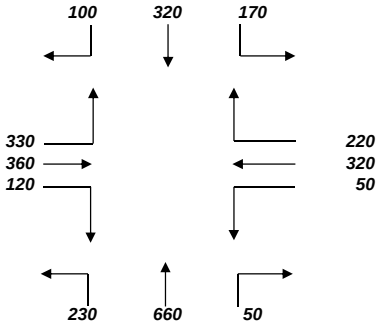
2016 Baseline ADTs



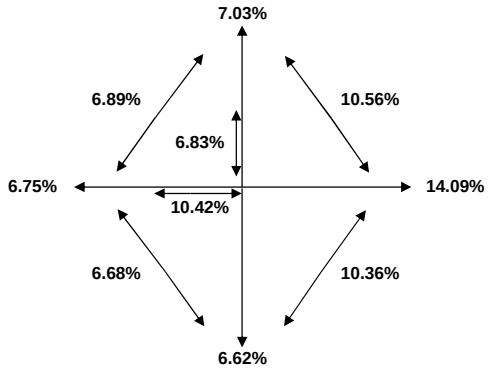
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

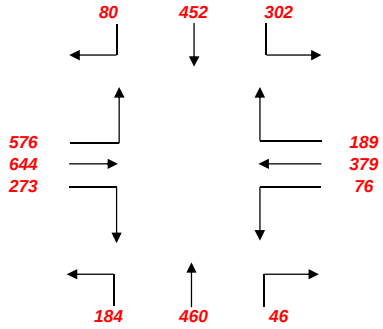


No Build Conditions

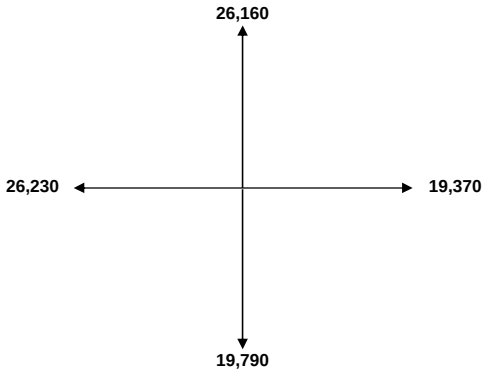
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

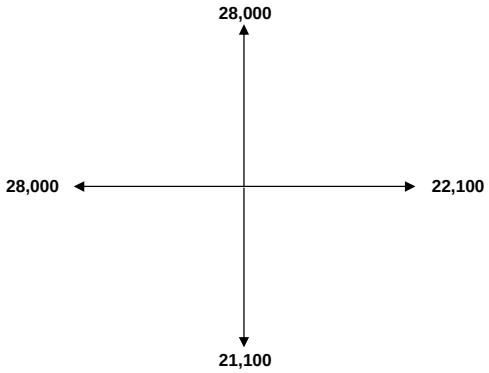
2016 Baseline Peak Hour Turning Movement Volumes (PM)



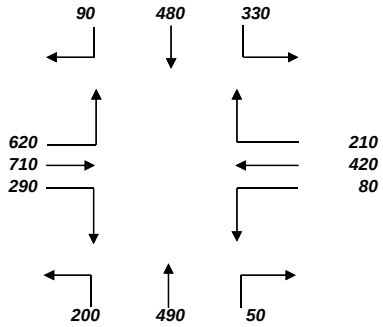
2016 Baseline ADTs



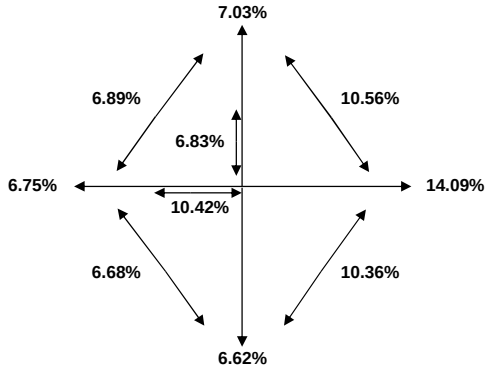
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

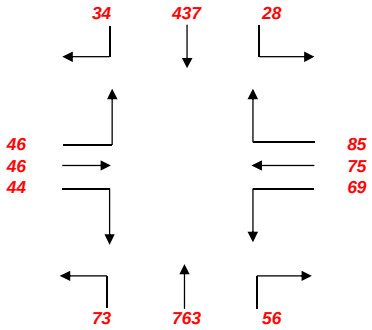


No Build Conditions

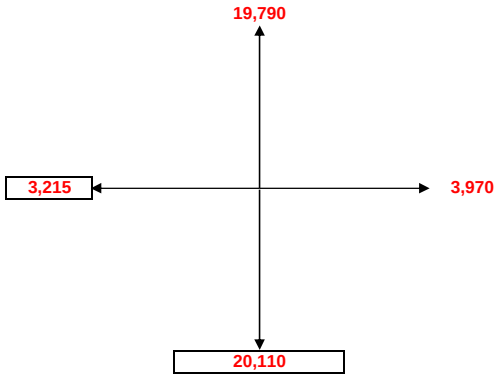
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

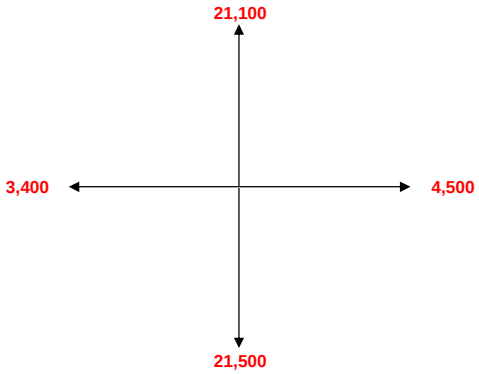
2016 Baseline Peak Hour Turning Movement Volumes (AM)



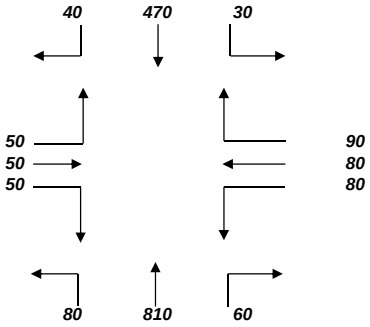
2016 Baseline ADTs



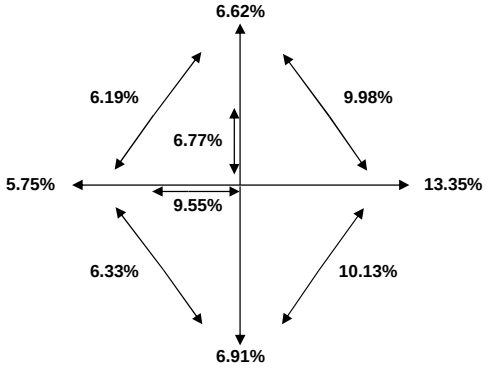
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

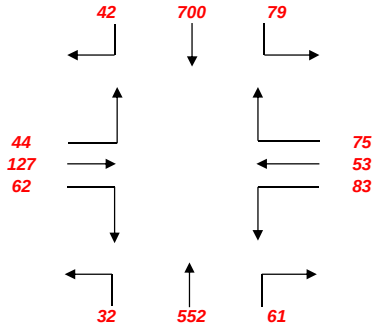


No Build Conditions

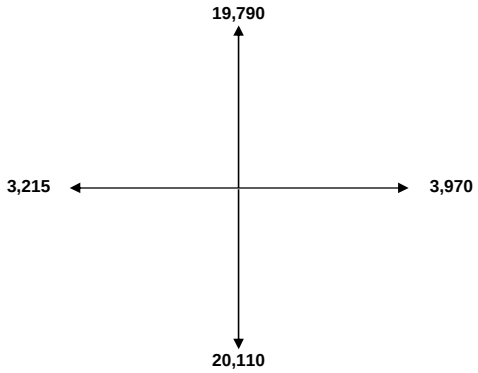
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

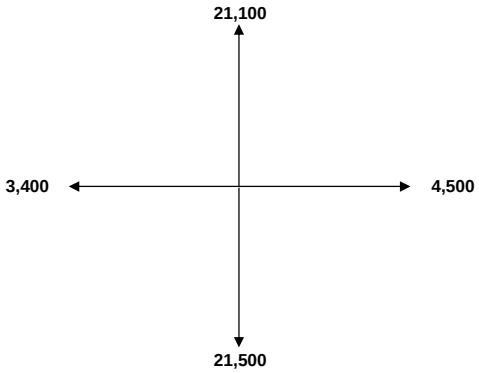
2016 Baseline Peak Hour Turning Movement Volumes (PM)



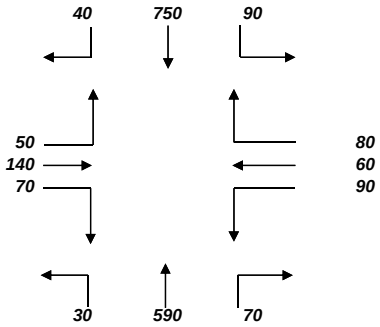
2016 Baseline ADTs



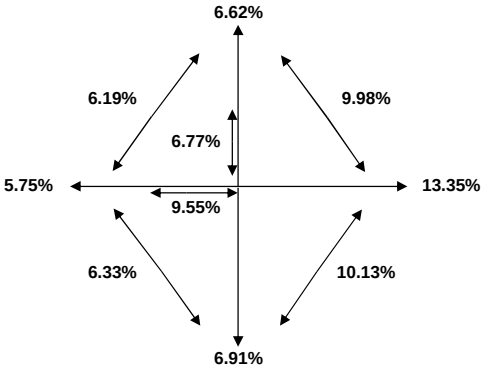
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

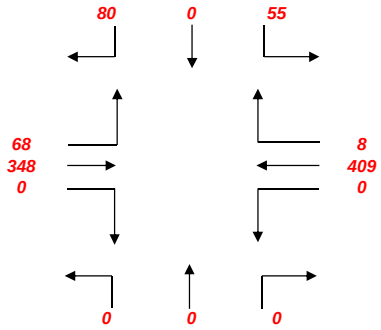


No Build Conditions

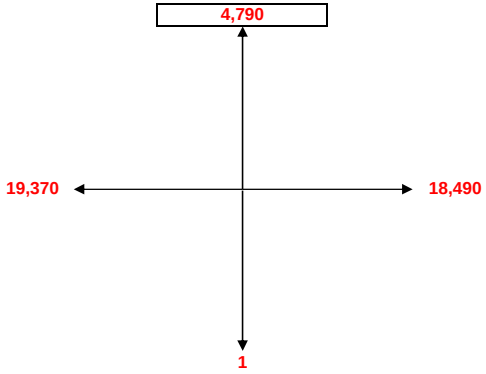
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

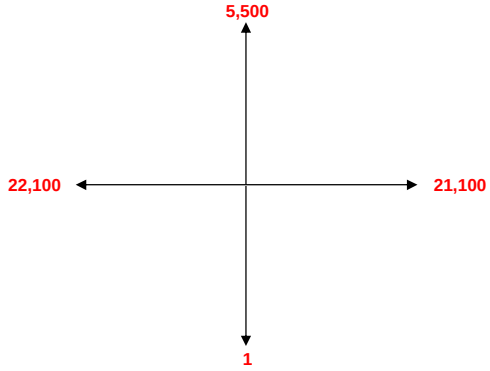
2016 Baseline Peak Hour Turning Movement Volumes (AM)



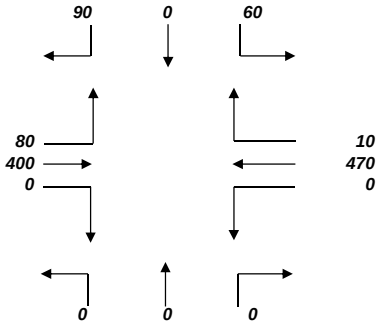
2016 Baseline ADTs



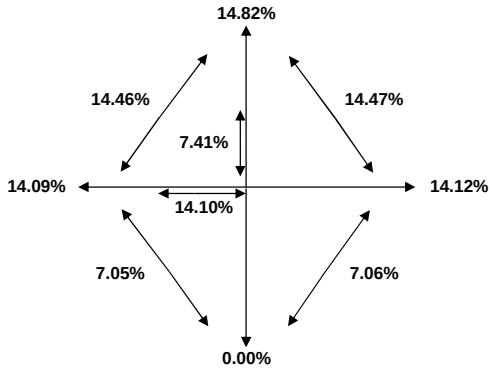
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

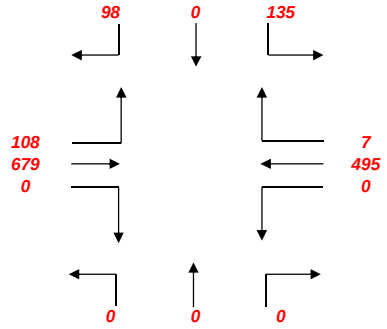


No Build Conditions

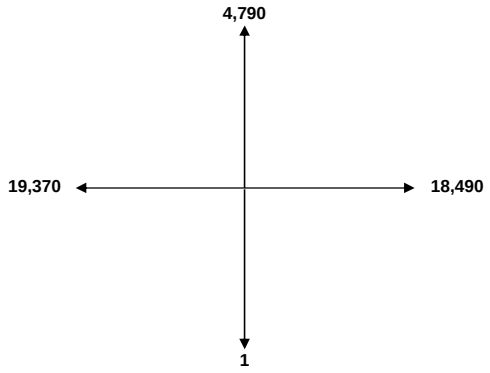
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

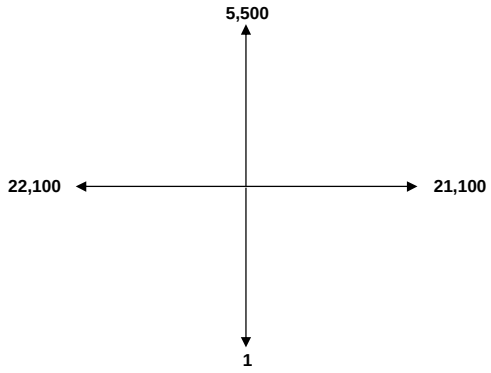
2016 Baseline Peak Hour Turning Movement Volumes (PM)



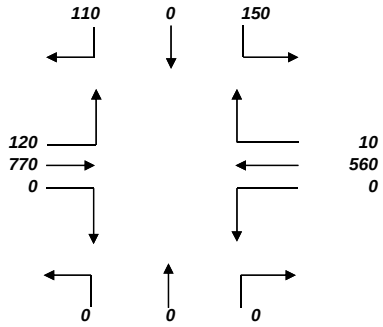
2016 Baseline ADTs



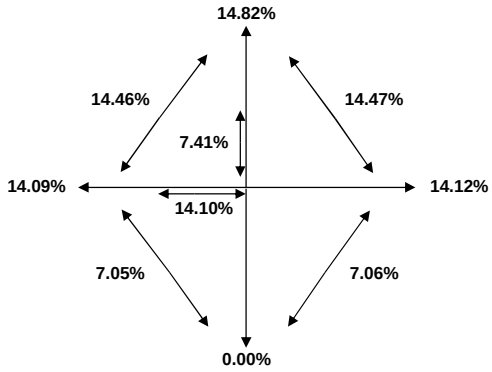
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

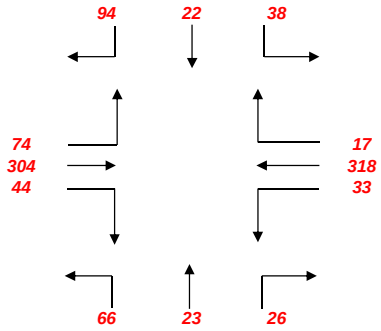


No Build Conditions

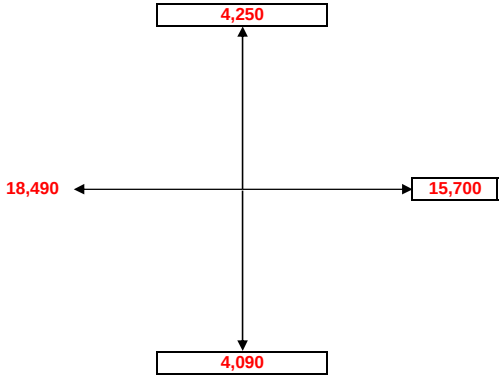
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

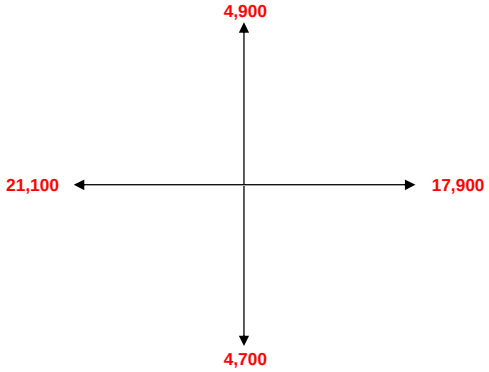
2016 Baseline Peak Hour Turning Movement Volumes (AM)



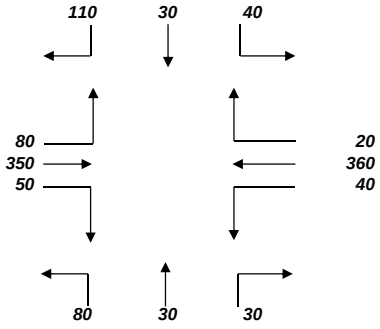
2016 Baseline ADTs



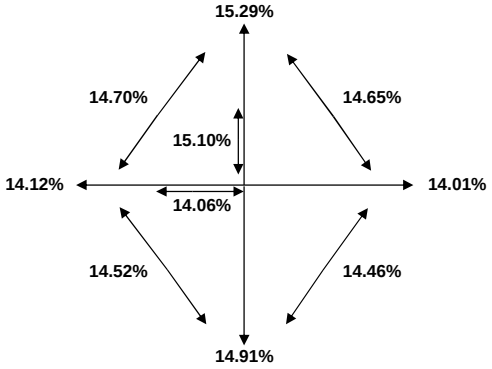
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

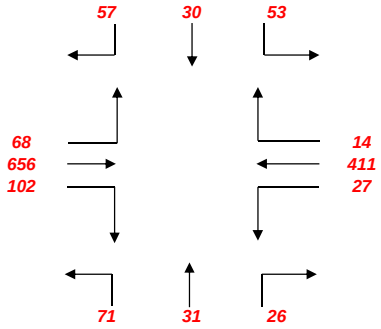


No Build Conditions

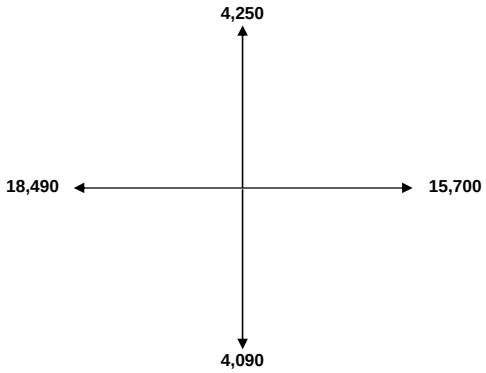
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

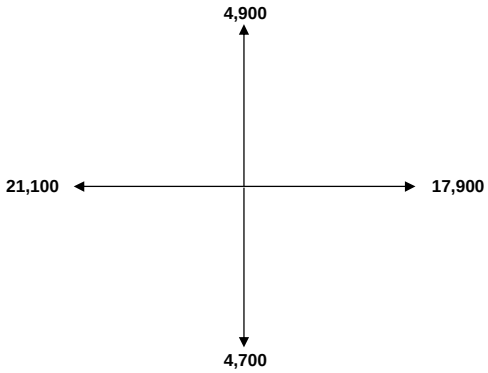
2016 Baseline Peak Hour Turning Movement Volumes (PM)



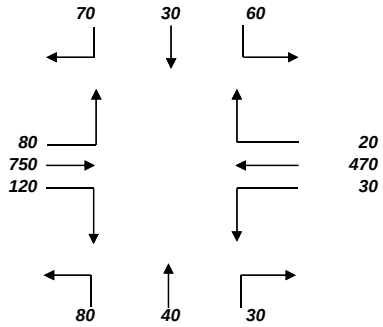
2016 Baseline ADTs



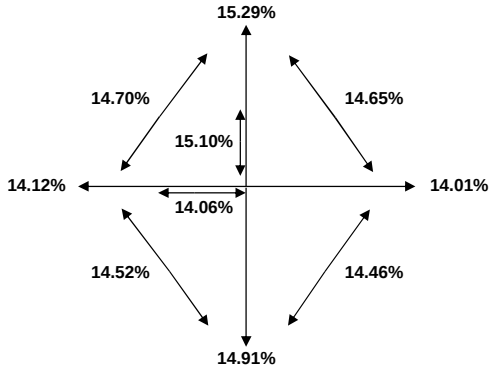
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

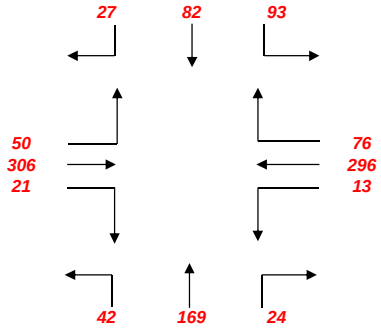


No Build Conditions

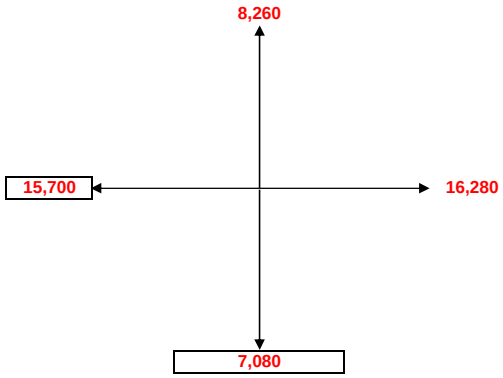
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

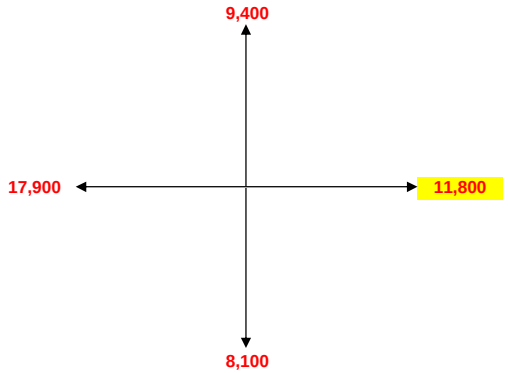
2016 Baseline Peak Hour Turning Movement Volumes (AM)



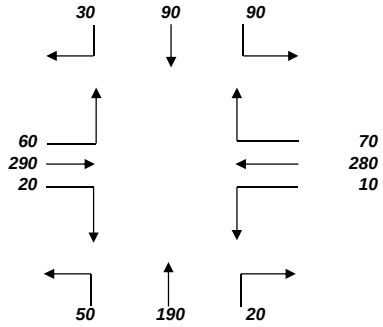
2016 Baseline ADTs



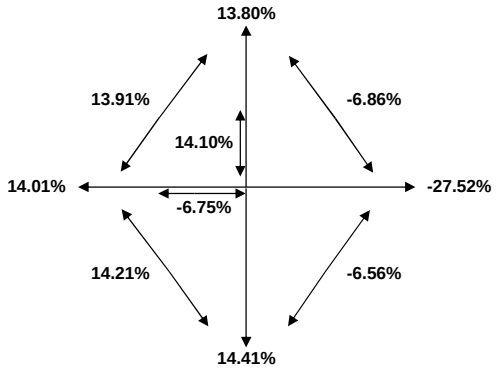
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

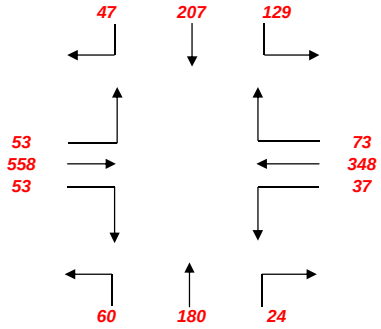


No Build Conditions

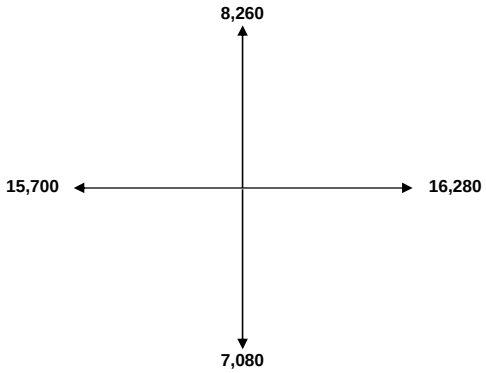
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

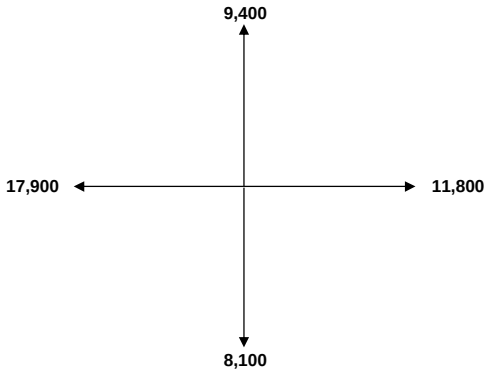
2016 Baseline Peak Hour Turning Movement Volumes (PM)



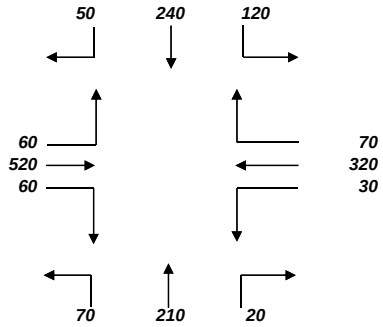
2016 Baseline ADTs



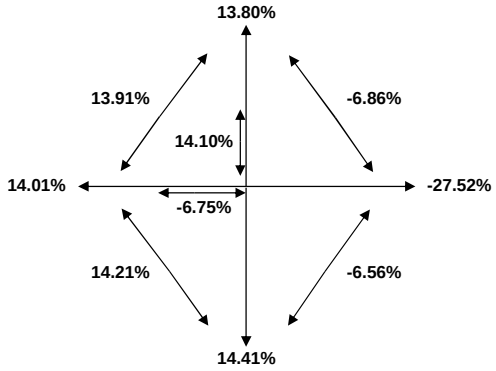
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

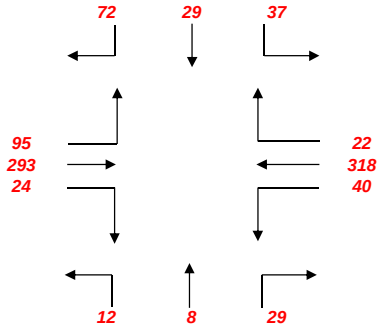


No Build Conditions

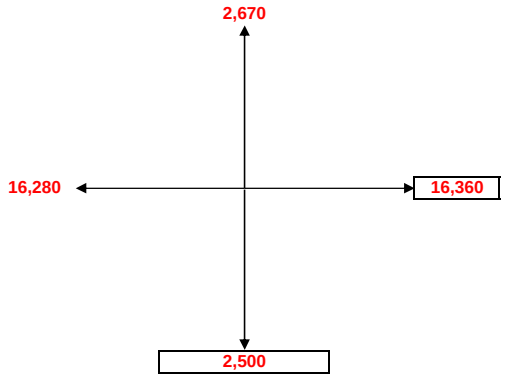
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

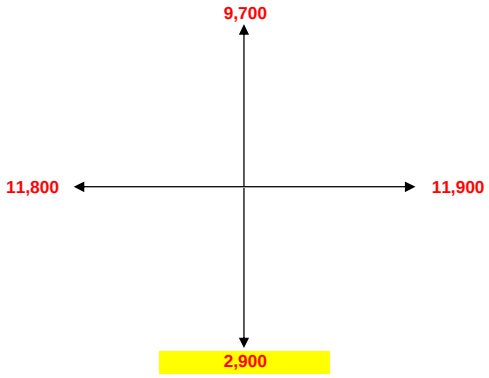
2016 Baseline Peak Hour Turning Movement Volumes (AM)



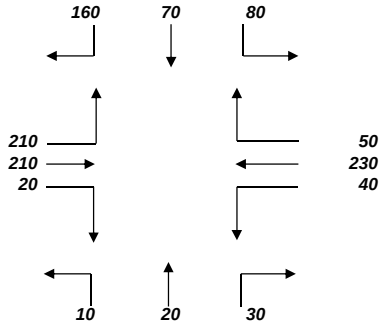
2016 Baseline ADTs



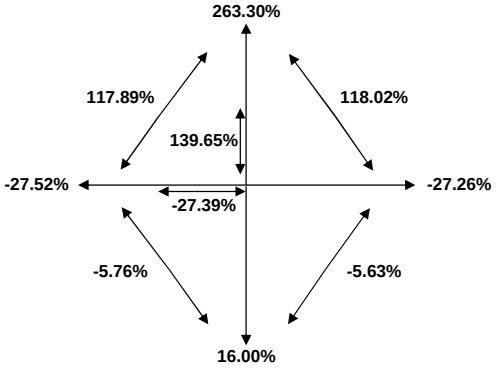
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

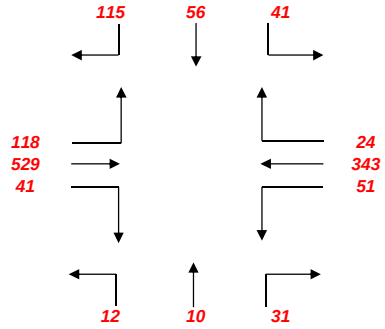


No Build Conditions

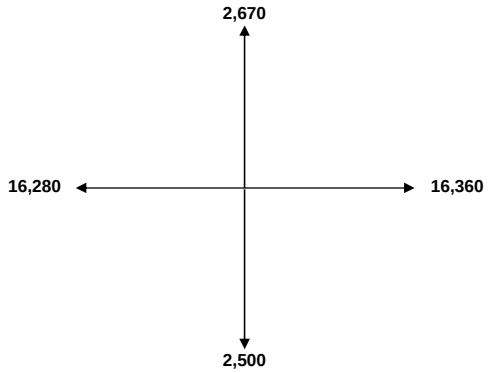
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

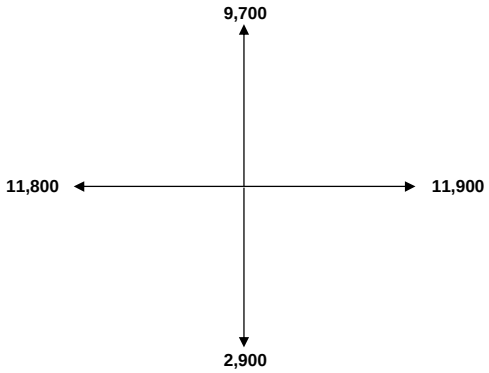
2016 Baseline Peak Hour Turning Movement Volumes (PM)



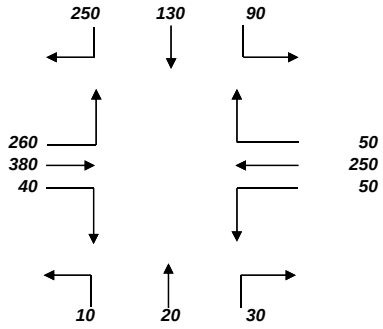
2016 Baseline ADTs



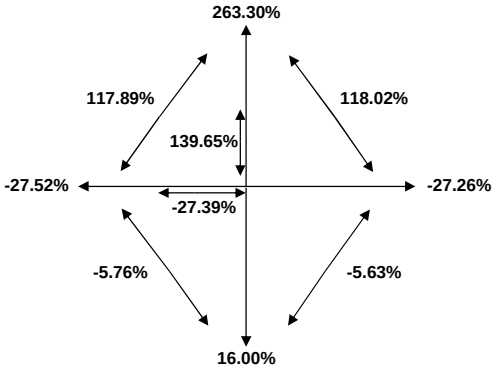
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

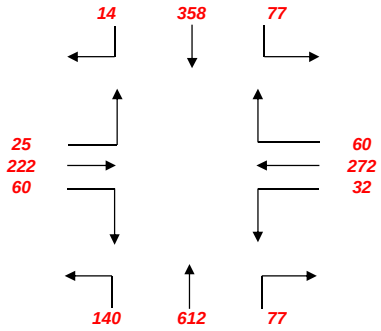


No Build Conditions

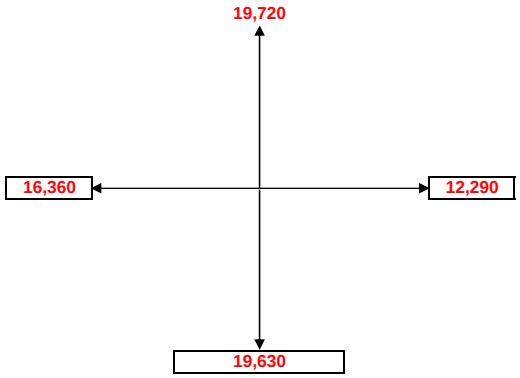
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

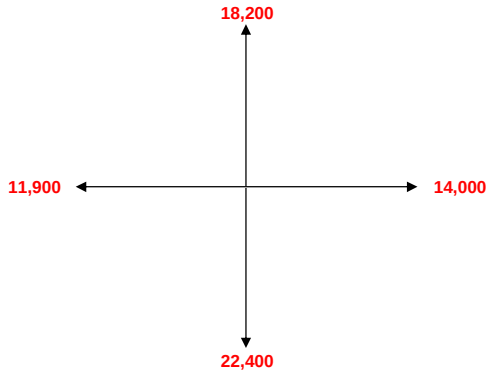
2016 Baseline Peak Hour Turning Movement Volumes (AM)



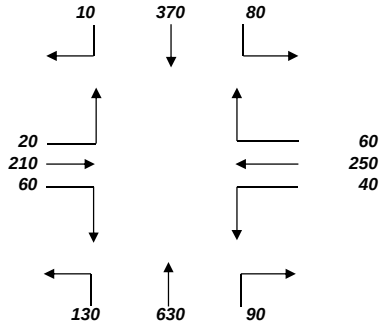
2016 Baseline ADTs



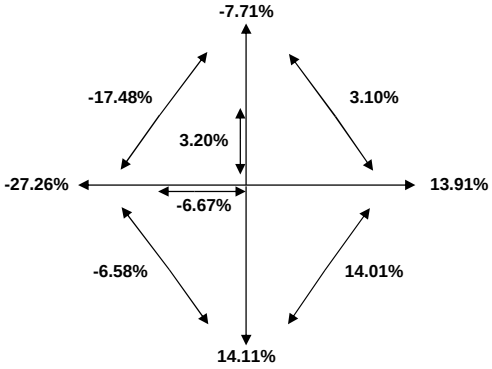
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

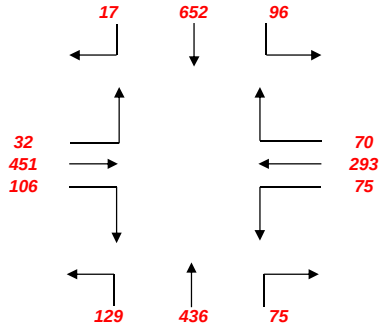


No Build Conditions

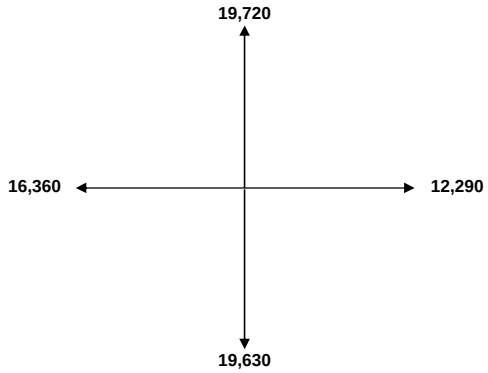
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

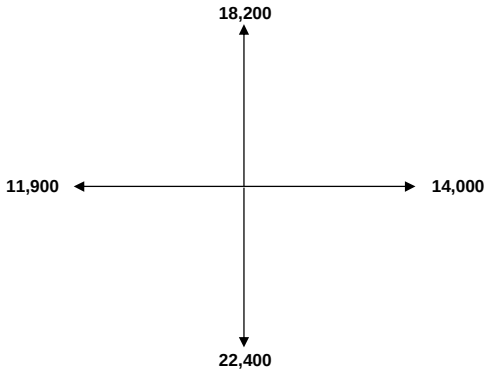
2016 Baseline Peak Hour Turning Movement Volumes (PM)



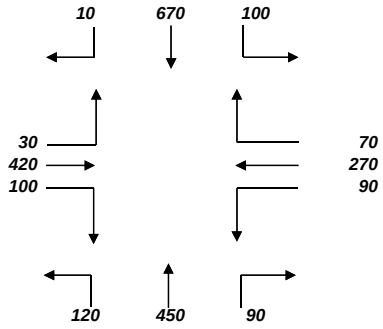
2016 Baseline ADTs



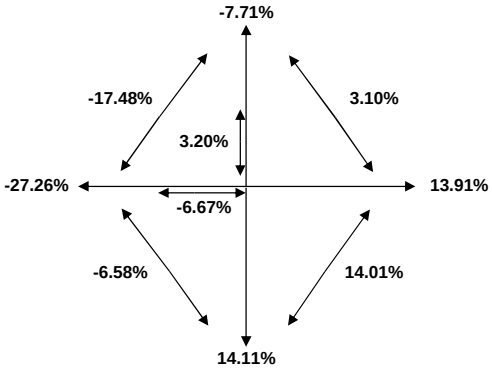
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

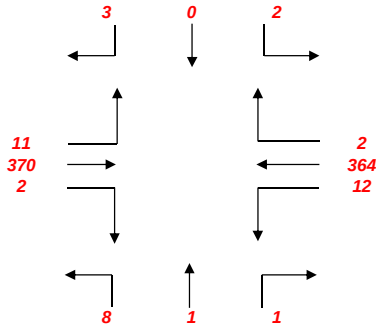


No Build Conditions

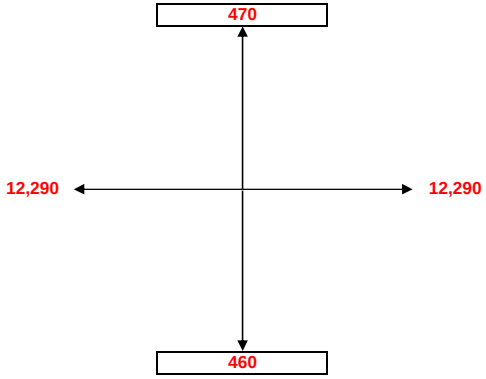
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

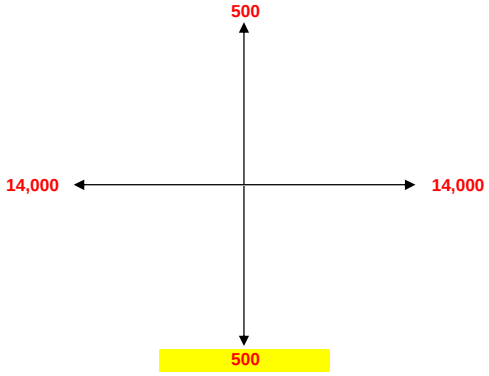
2016 Baseline Peak Hour Turning Movement Volumes (AM)



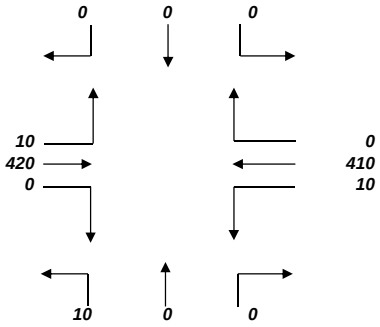
2016 Baseline ADTs



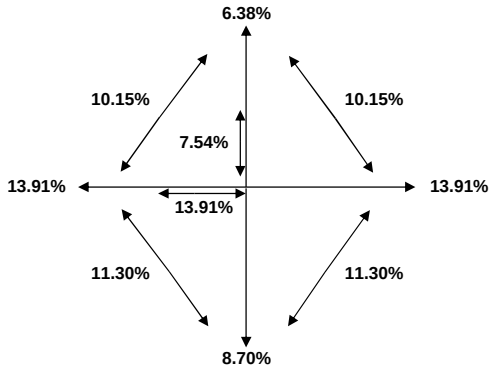
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

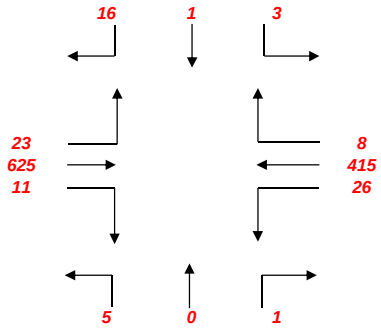


No Build Conditions

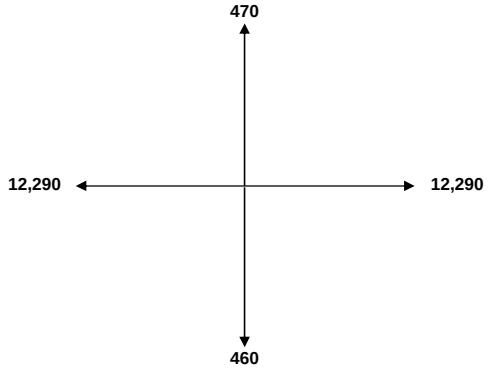
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

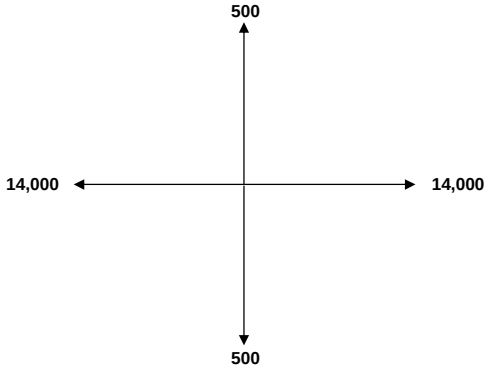
2016 Baseline Peak Hour Turning Movement Volumes (PM)



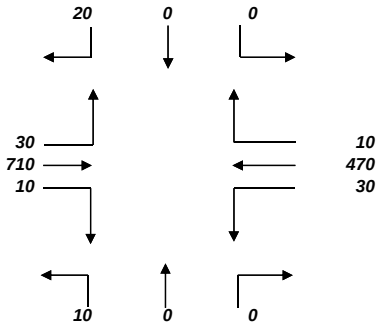
2016 Baseline ADTs



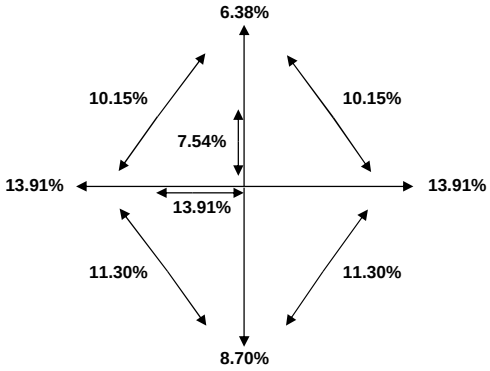
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

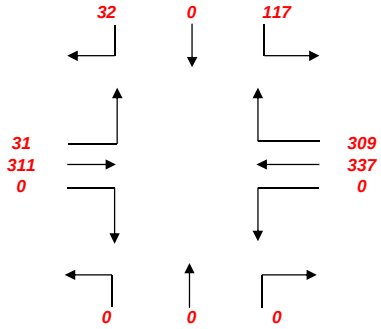


No Build Conditions

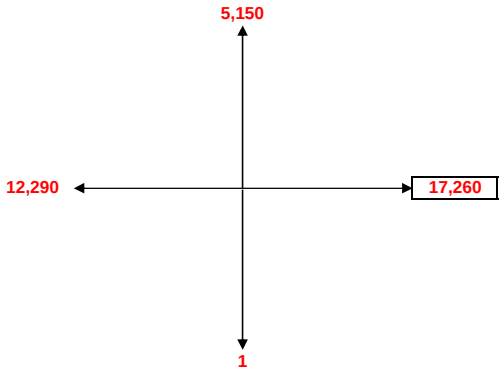
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

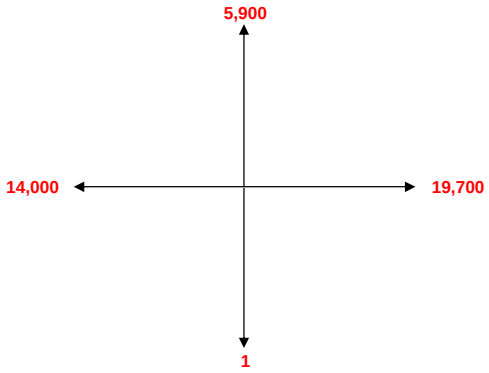
2016 Baseline Peak Hour Turning Movement Volumes (AM)



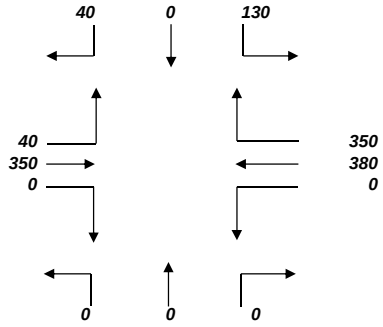
2016 Baseline ADTs



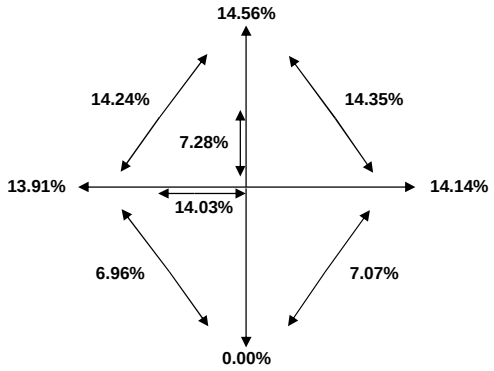
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

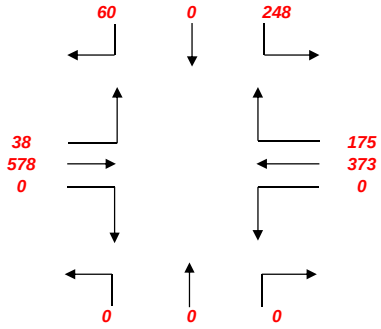


No Build Conditions

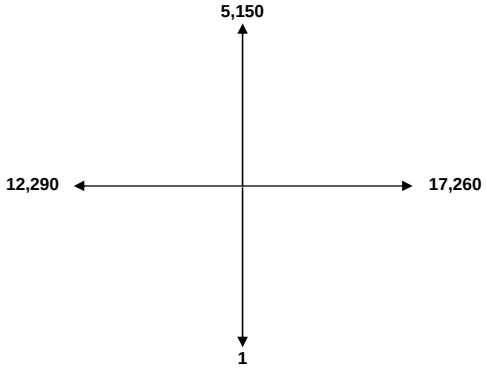
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

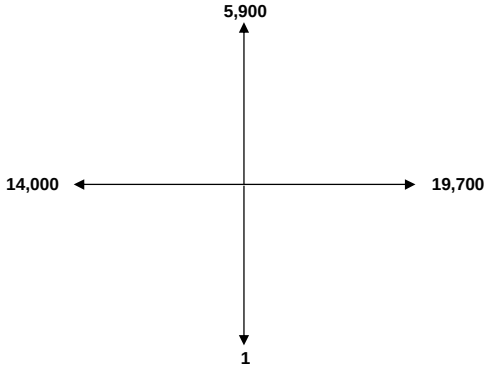
2016 Baseline Peak Hour Turning Movement Volumes (PM)



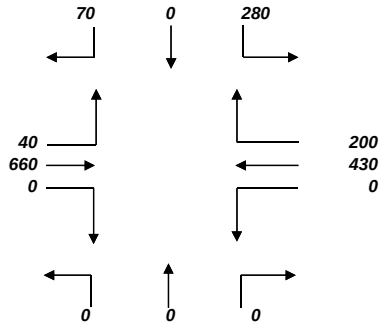
2016 Baseline ADTs



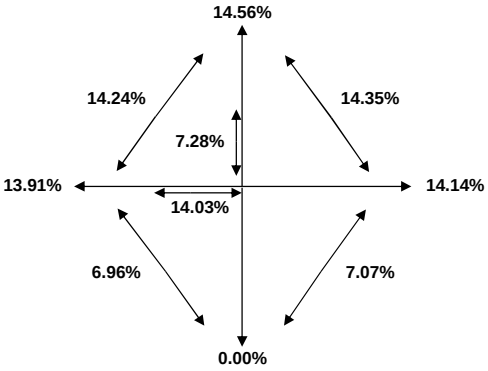
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

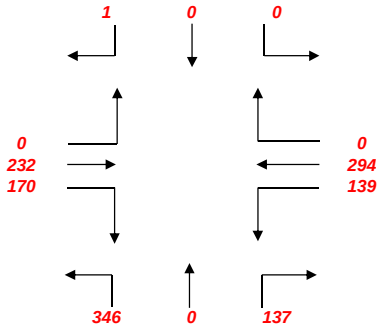


No Build Conditions

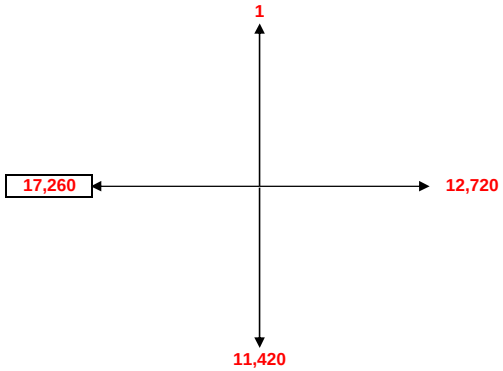
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

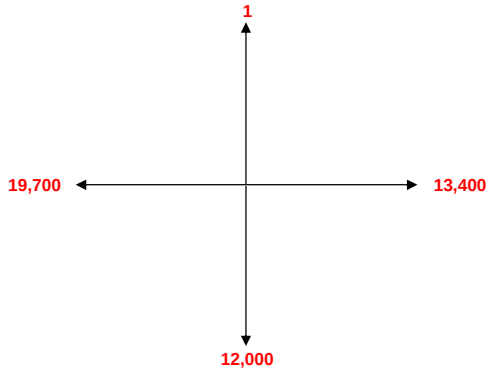
2016 Baseline Peak Hour Turning Movement Volumes (AM)



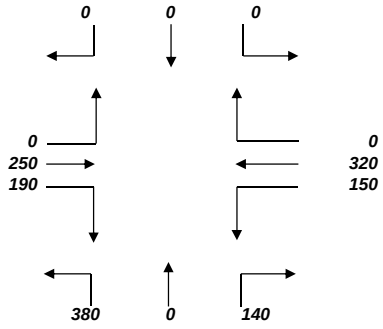
2016 Baseline ADTs



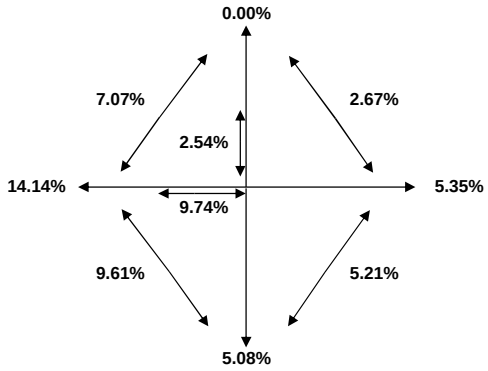
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

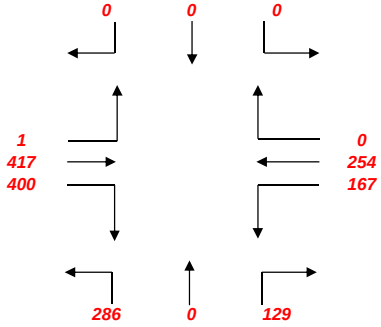


No Build Conditions

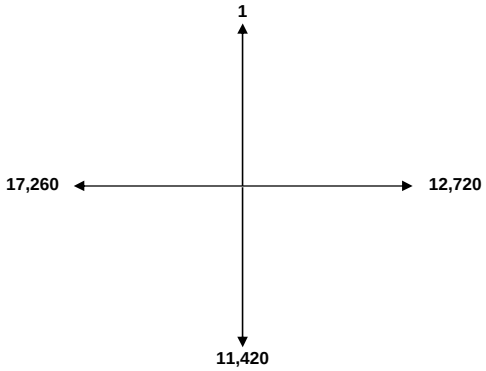
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

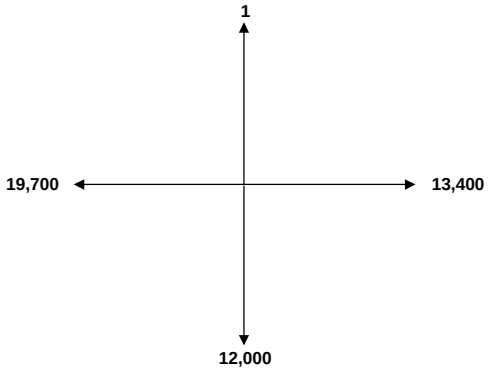
2016 Baseline Peak Hour Turning Movement Volumes (PM)



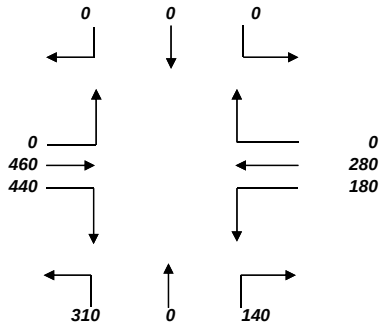
2016 Baseline ADTs



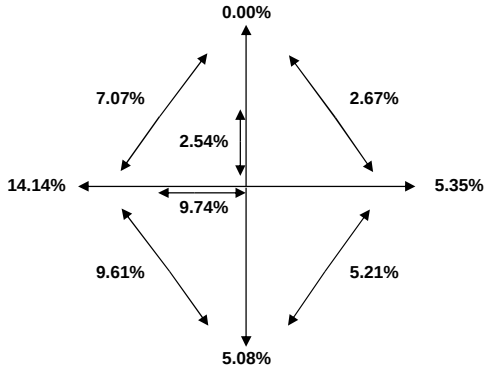
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

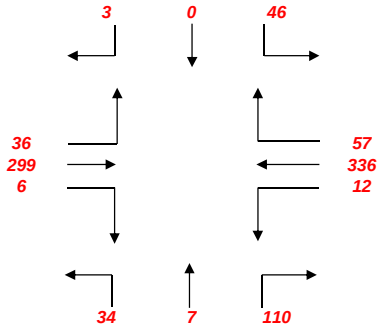


No Build Conditions

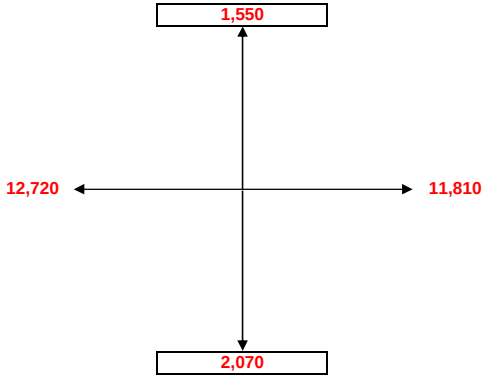
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

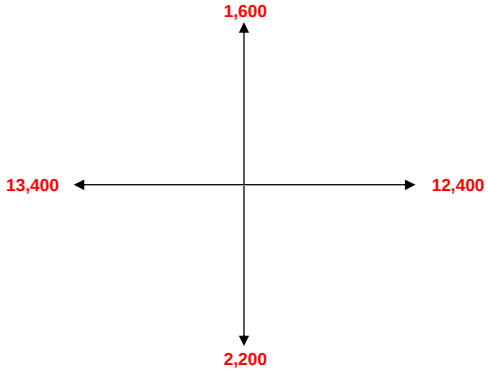
2016 Baseline Peak Hour Turning Movement Volumes (AM)



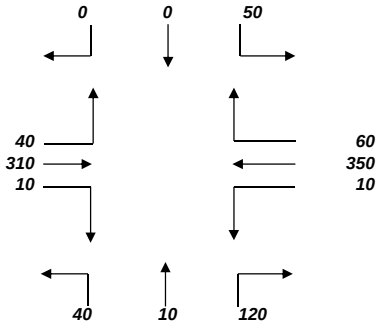
2016 Baseline ADTs



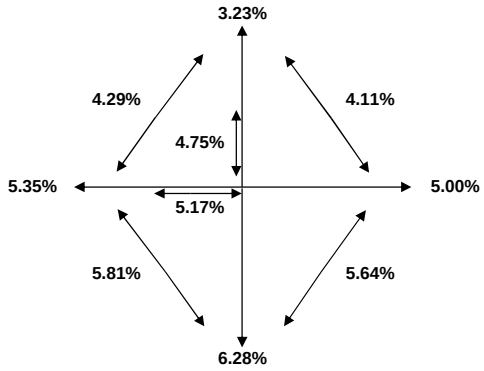
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

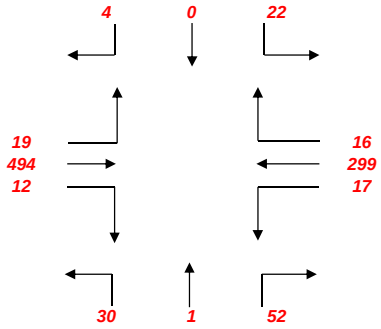


No Build Conditions

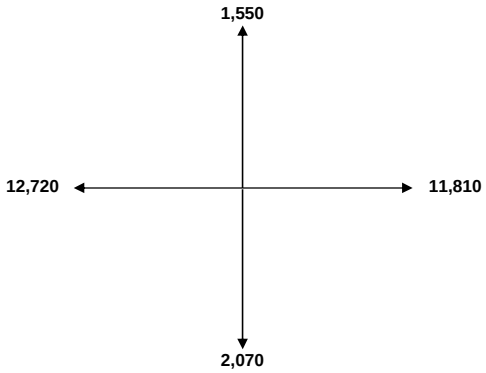
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

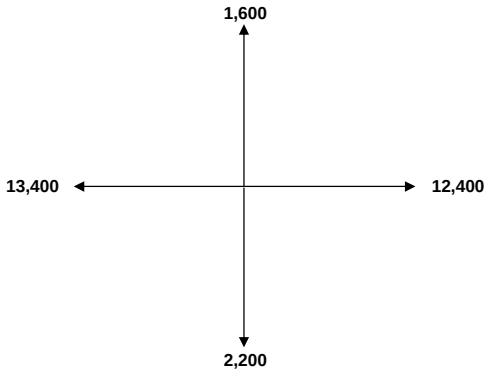
2016 Baseline Peak Hour Turning Movement Volumes (PM)



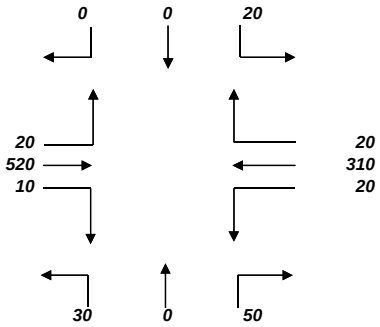
2016 Baseline ADTs



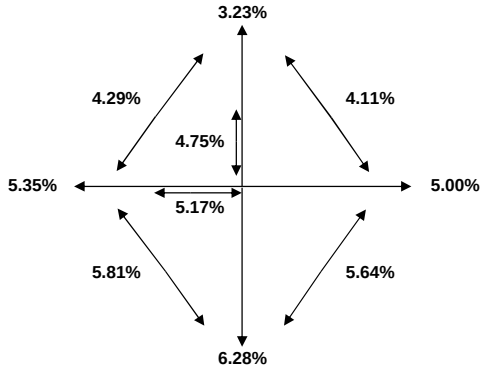
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

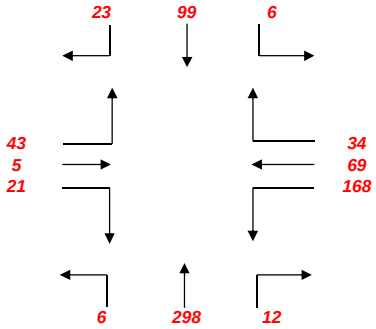


No Build Conditions

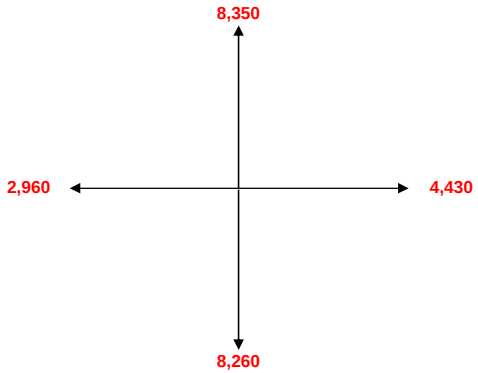
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

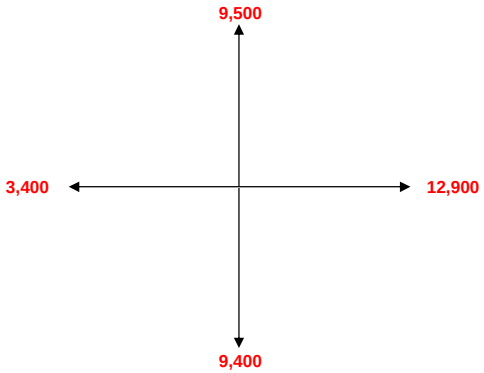
2016 Baseline Peak Hour Turning Movement Volumes (AM)



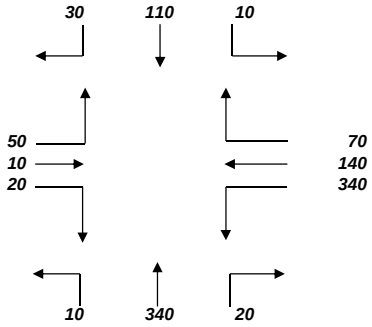
2016 Baseline ADTs



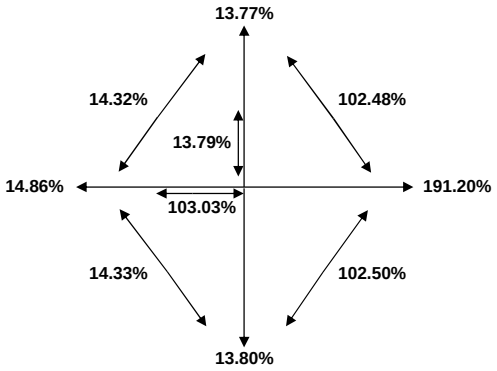
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

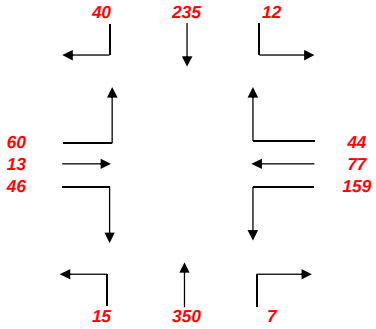


No Build Conditions

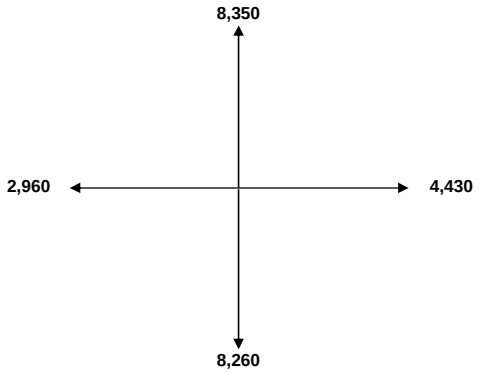
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

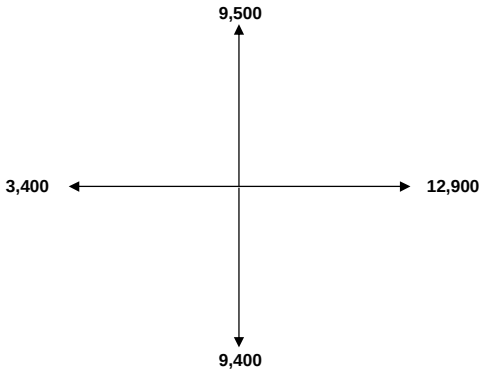
2016 Baseline Peak Hour Turning Movement Volumes (PM)



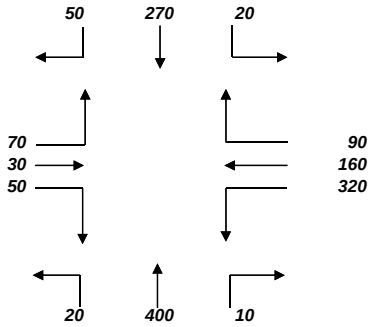
2016 Baseline ADTs



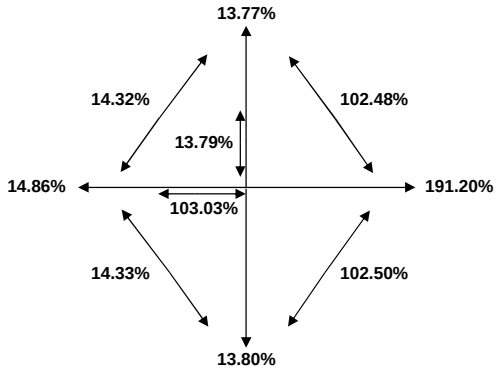
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

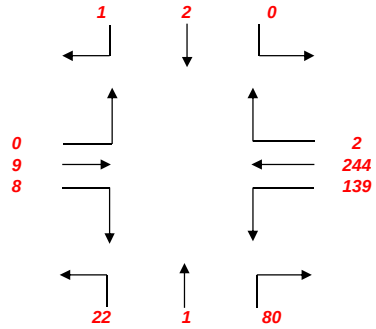


No Build Conditions

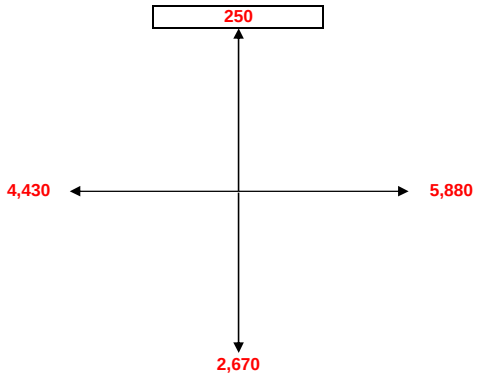
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

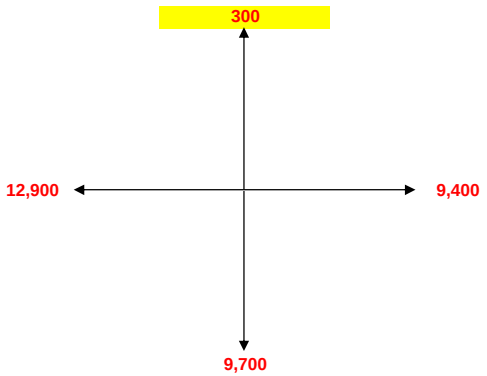
2016 Baseline Peak Hour Turning Movement Volumes (AM)



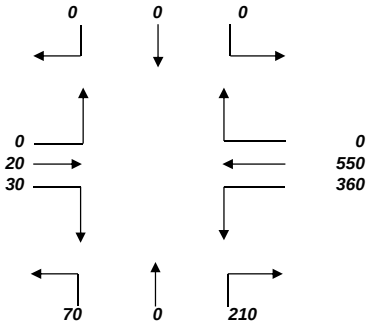
2016 Baseline ADTs



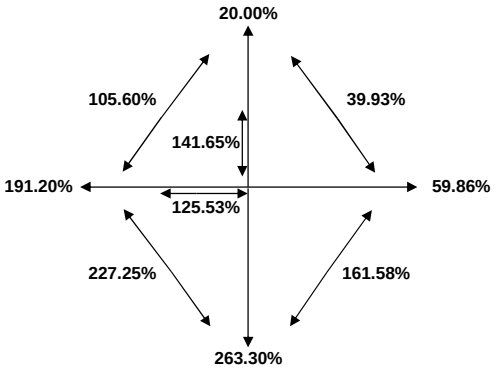
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

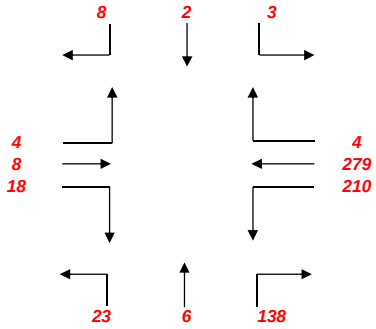


No Build Conditions

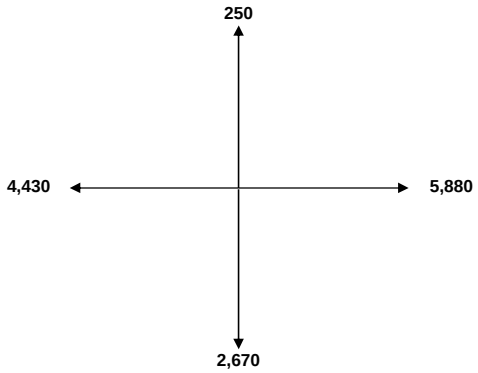
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

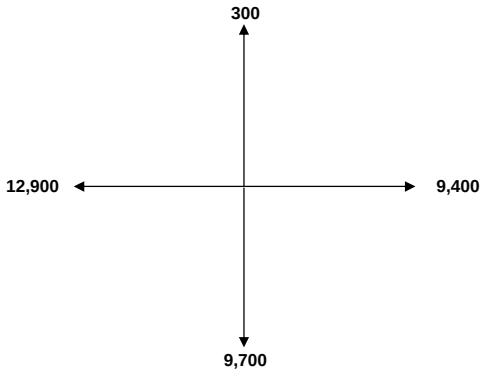
2016 Baseline Peak Hour Turning Movement Volumes (PM)



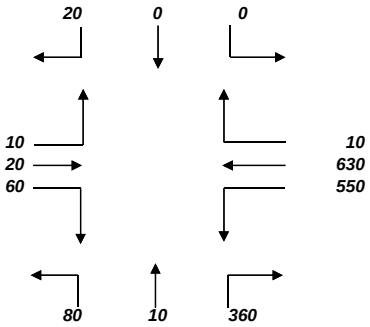
2016 Baseline ADTs



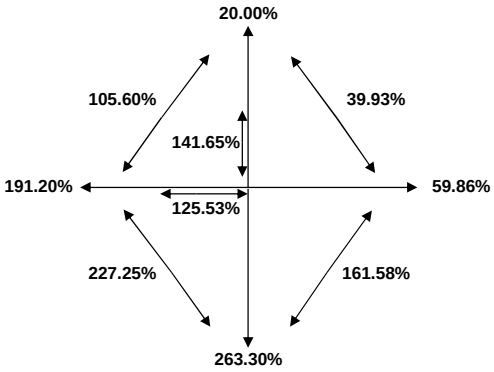
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

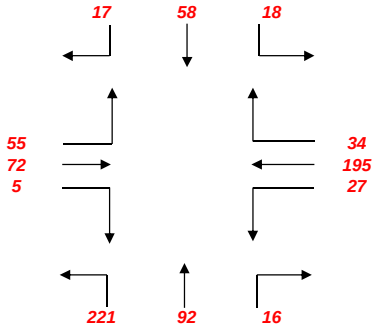


No Build Conditions

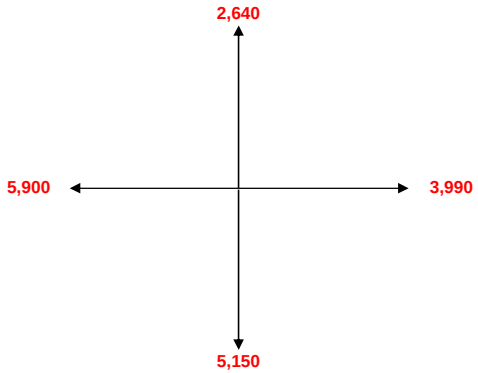
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

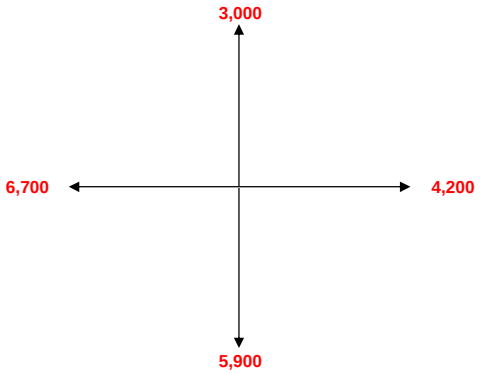
2016 Baseline Peak Hour Turning Movement Volumes (AM)



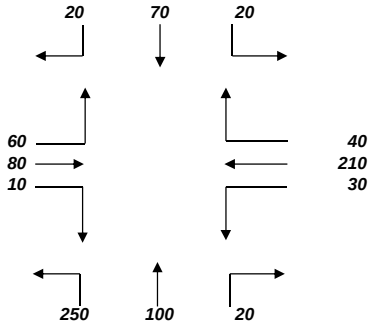
2016 Baseline ADTs



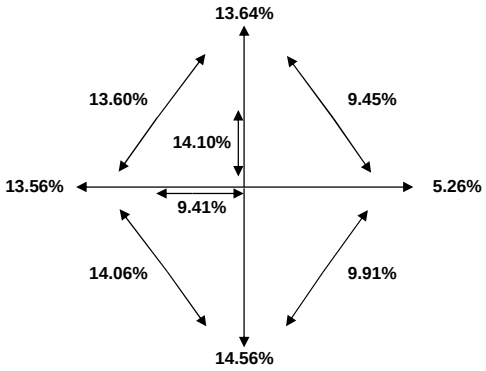
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

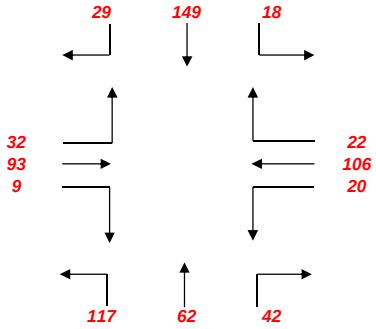


No Build Conditions

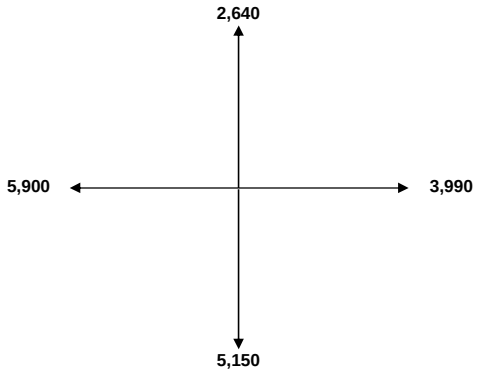
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

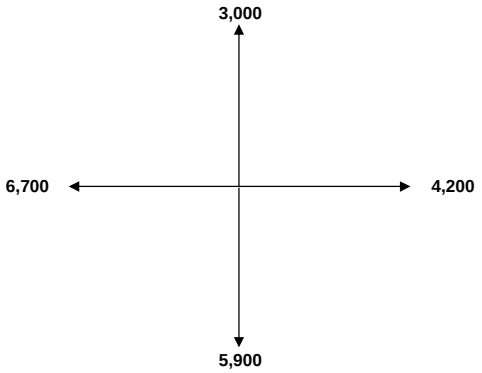
2016 Baseline Peak Hour Turning Movement Volumes (PM)



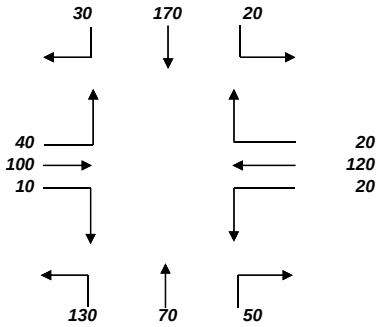
2016 Baseline ADTs



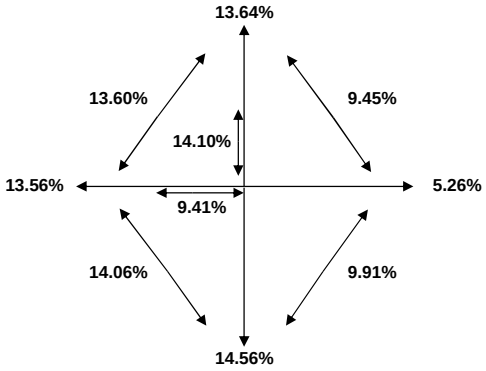
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

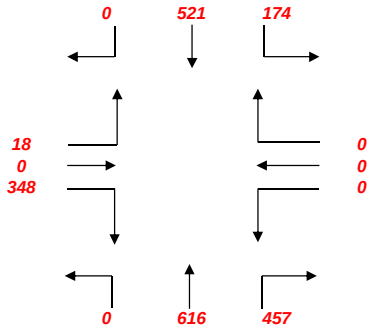


No Build Conditions

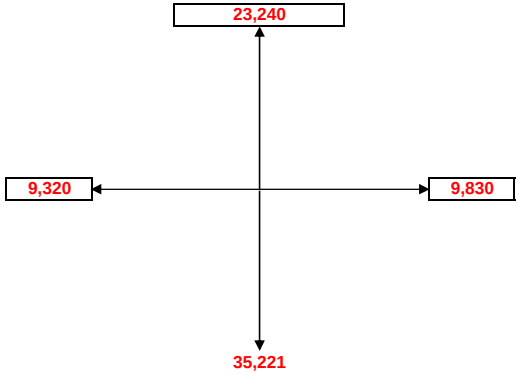
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

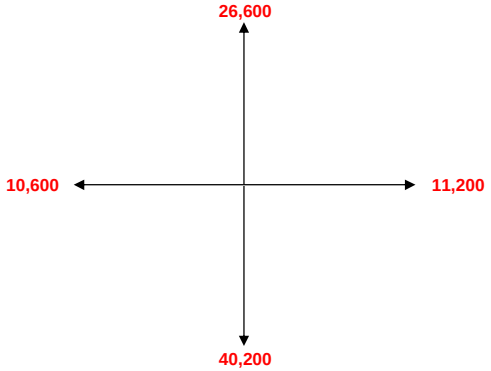
2016 Baseline Peak Hour Turning Movement Volumes (AM)



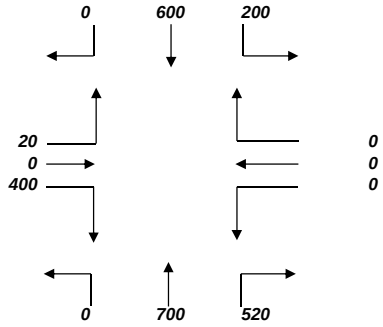
2016 Baseline ADTs



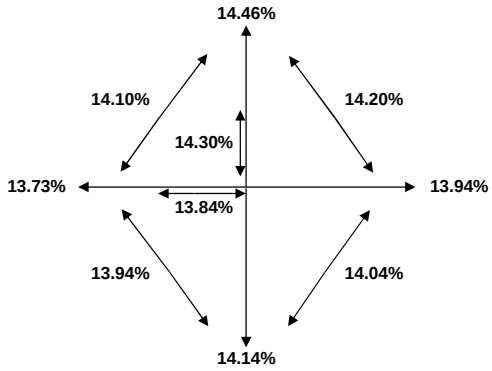
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

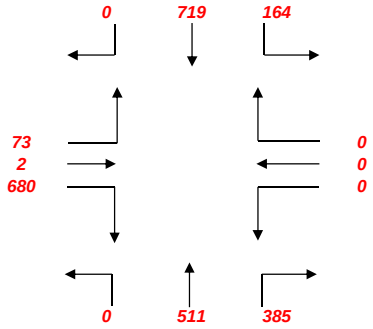


No Build Conditions

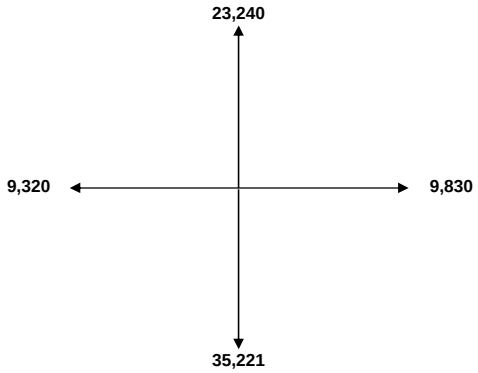
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

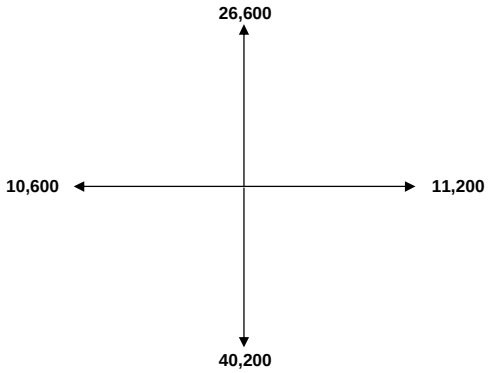
2016 Baseline Peak Hour Turning Movement Volumes (PM)



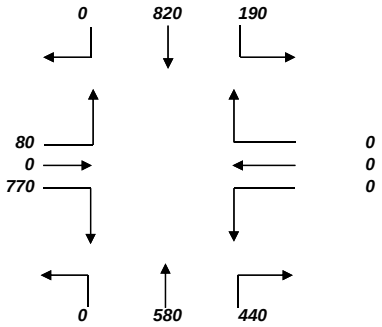
2016 Baseline ADTs



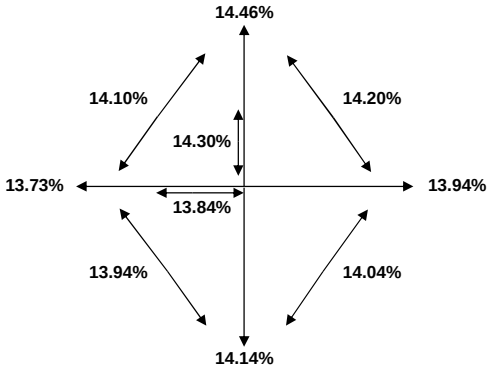
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

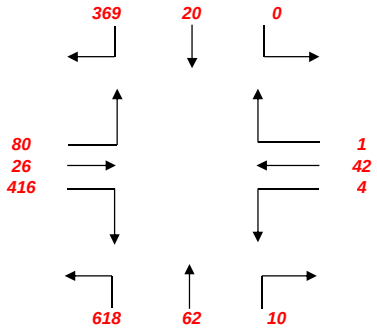


No Build Conditions

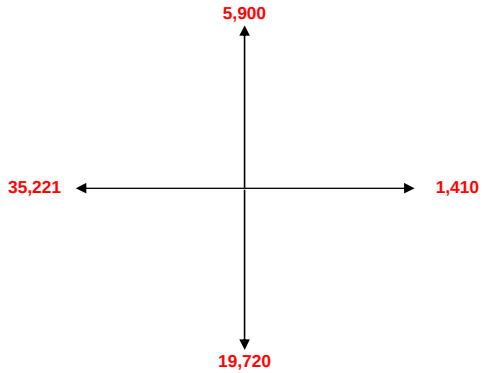
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove Way

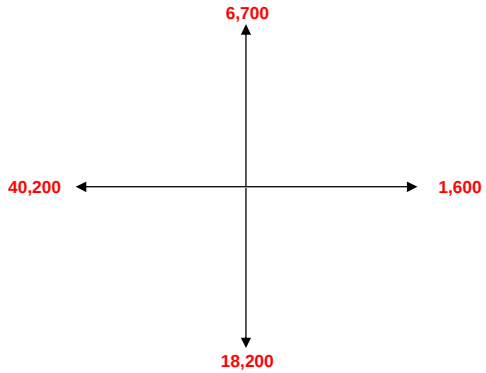
2016 Baseline Peak Hour Turning Movement Volumes (AM)



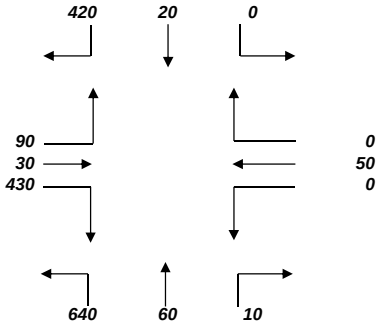
2016 Baseline ADTs



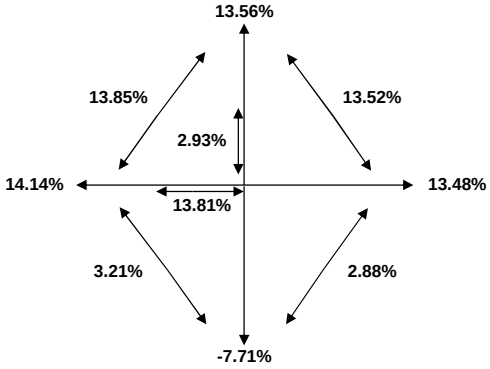
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

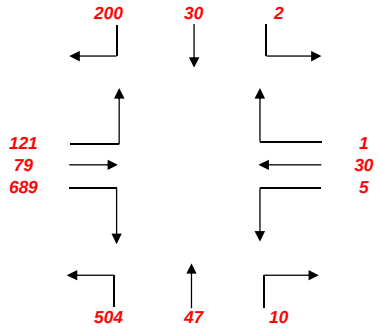


No Build Conditions

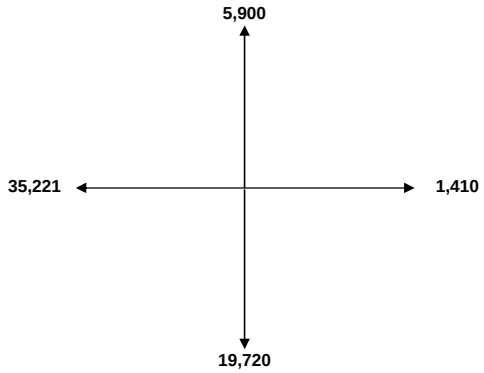
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove W

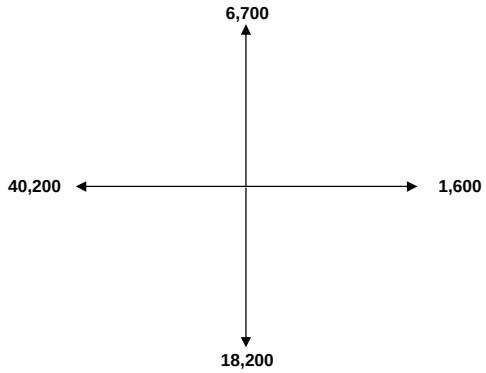
2016 Baseline Peak Hour Turning Movement Volumes (PM)



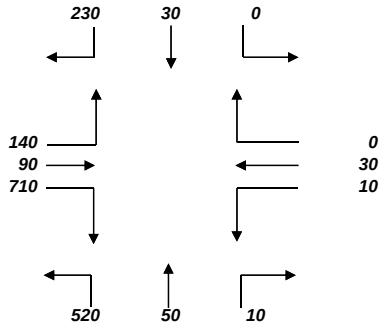
2016 Baseline ADTs



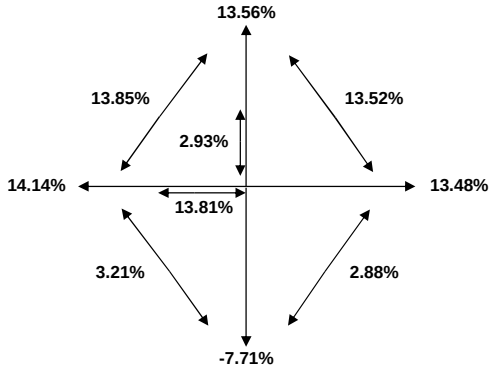
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

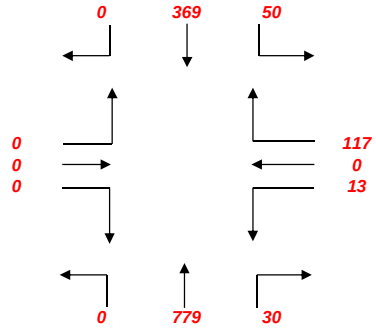


No Build Conditions

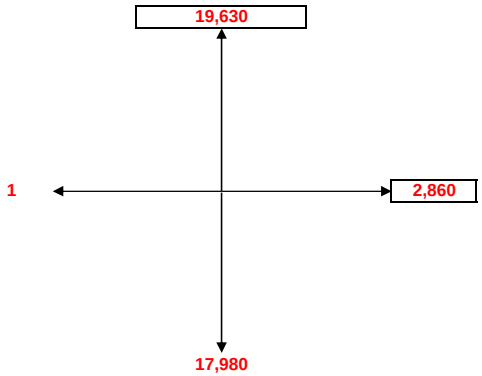
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

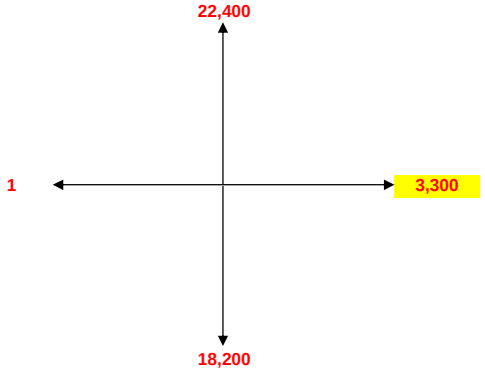
2016 Baseline Peak Hour Turning Movement Volumes (AM)



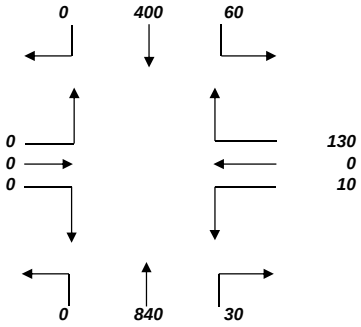
2016 Baseline ADTs



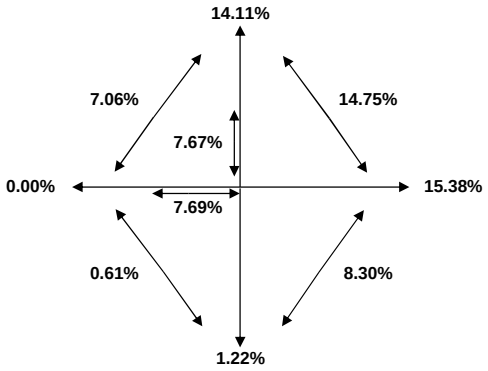
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

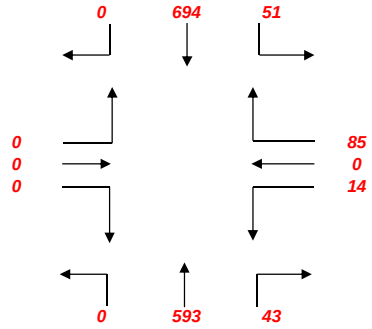


No Build Conditions

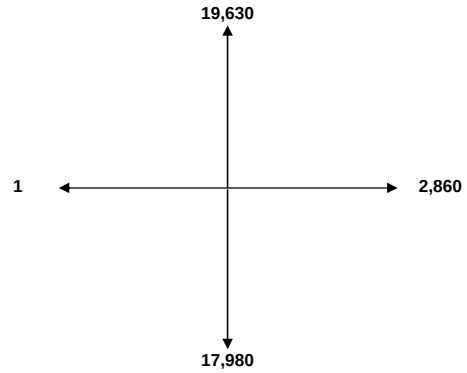
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

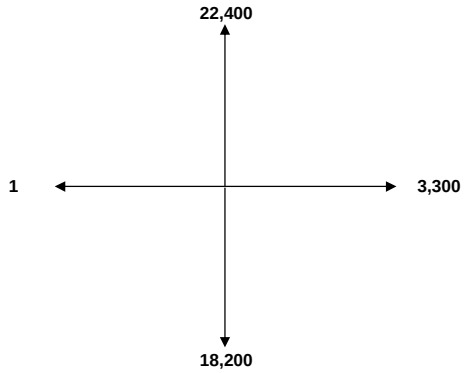
2016 Baseline Peak Hour Turning Movement Volumes (PM)



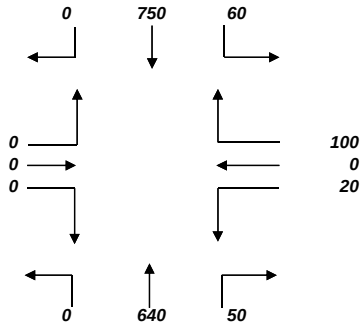
2016 Baseline ADTs



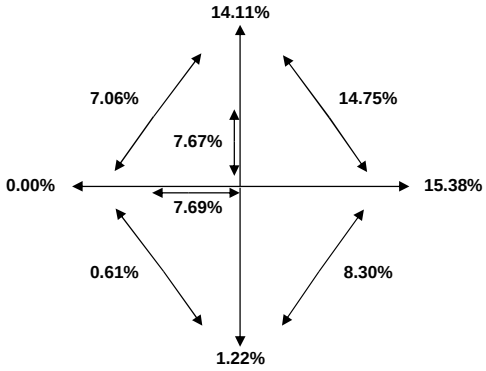
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

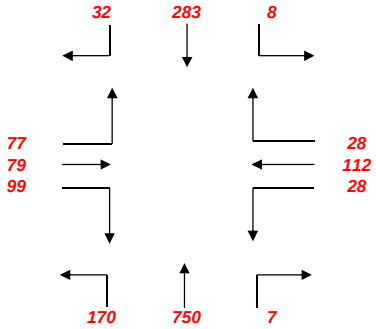


No Build Conditions

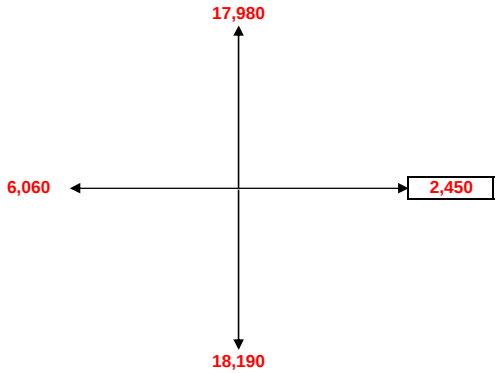
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

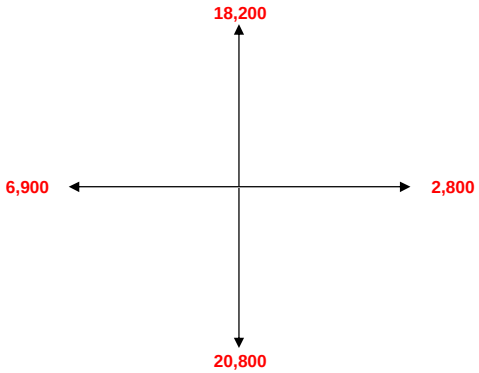
2016 Baseline Peak Hour Turning Movement Volumes (AM)



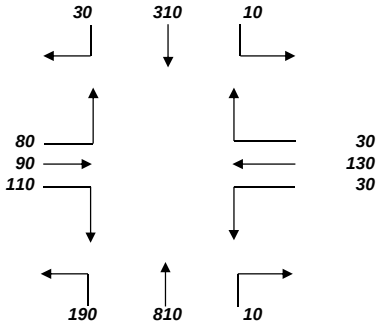
2016 Baseline ADTs



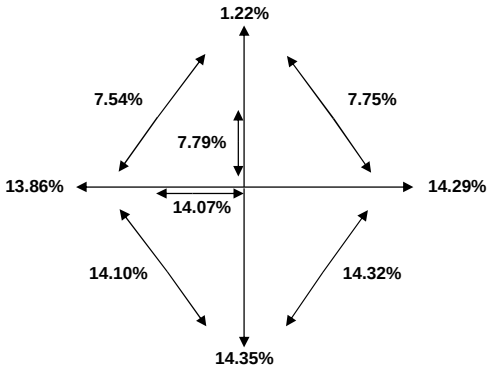
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

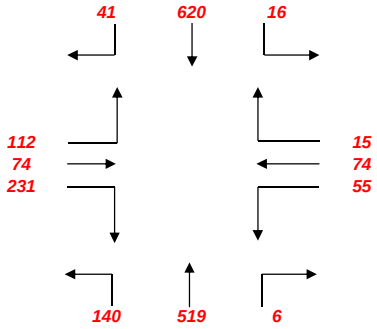


No Build Conditions

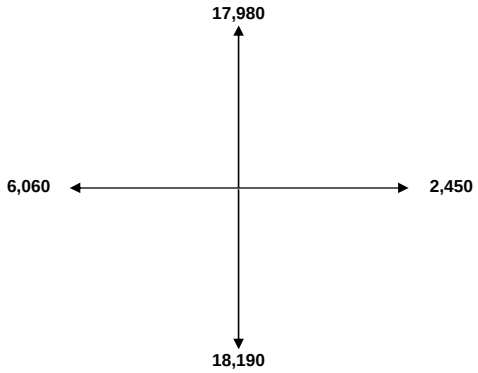
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

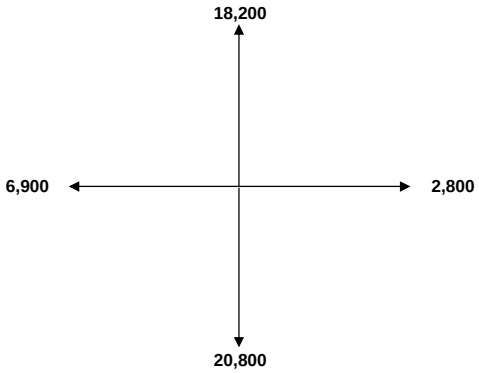
2016 Baseline Peak Hour Turning Movement Volumes (PM)



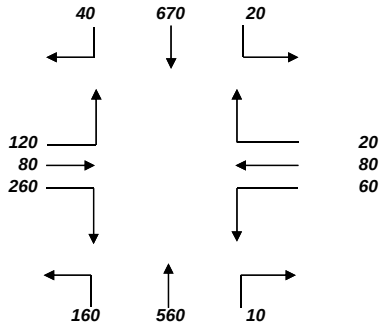
2016 Baseline ADTs



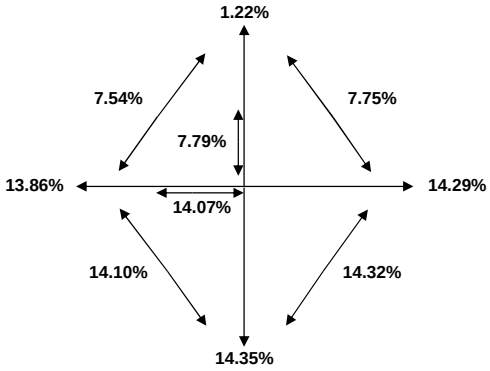
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

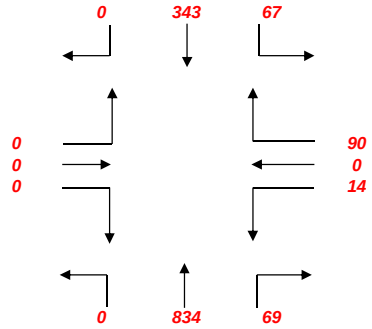


No Build Conditions

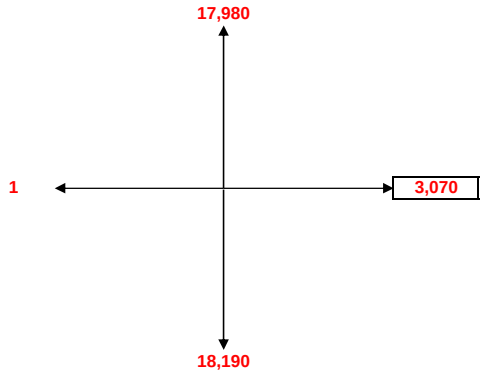
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

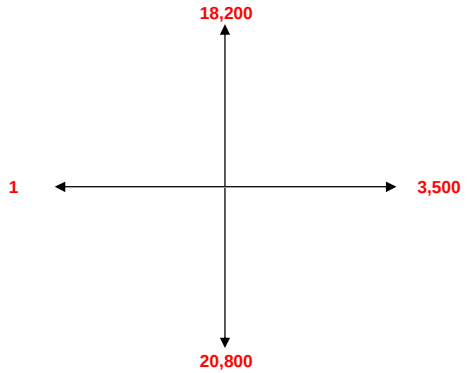
2016 Baseline Peak Hour Turning Movement Volumes (AM)



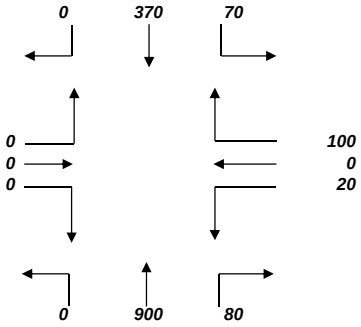
2016 Baseline ADTs



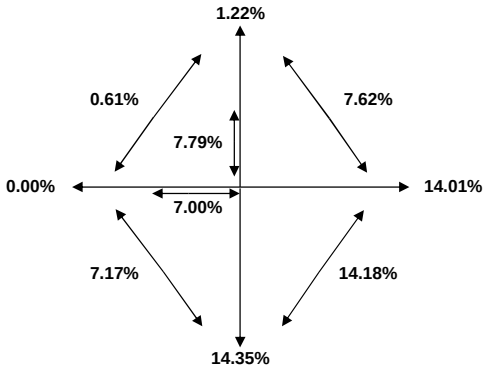
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

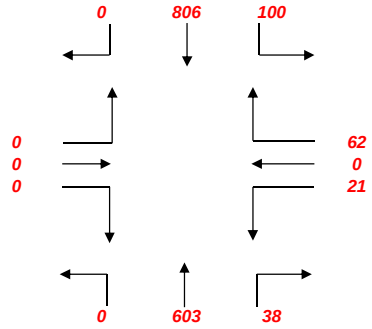


No Build Conditions

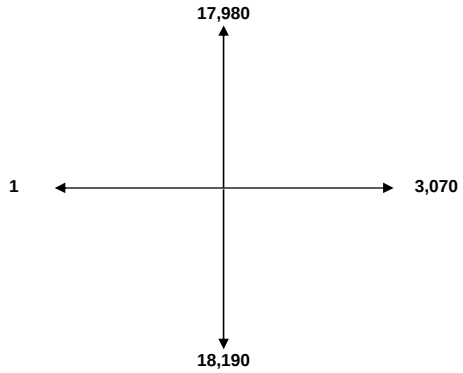
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

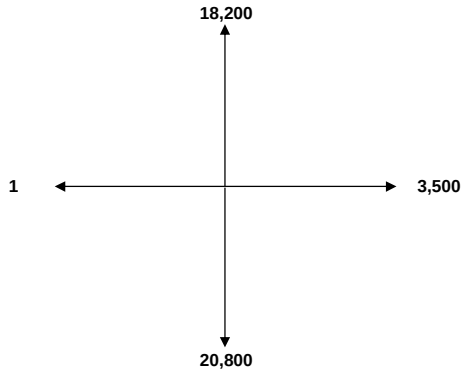
2016 Baseline Peak Hour Turning Movement Volumes (PM)



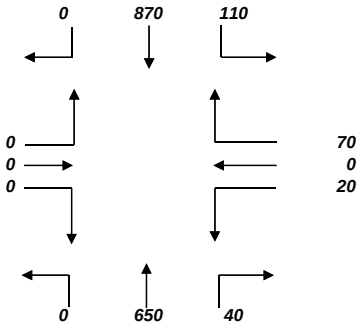
2016 Baseline ADTs



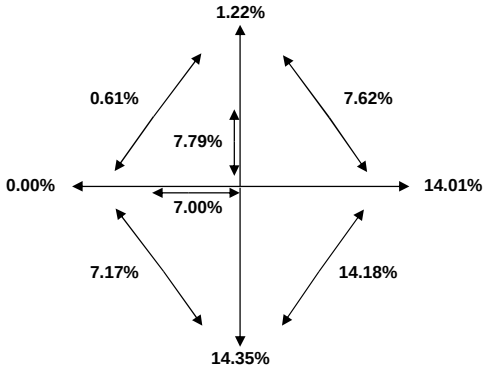
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

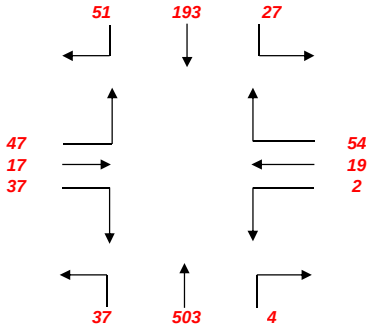


No Build Conditions

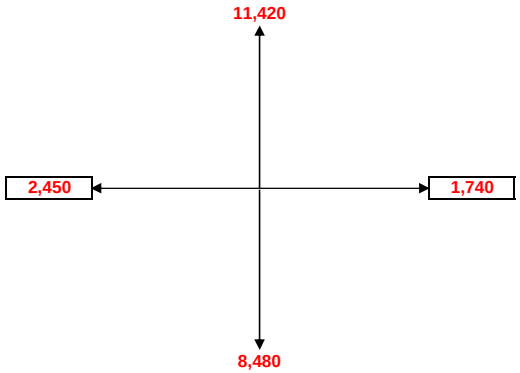
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

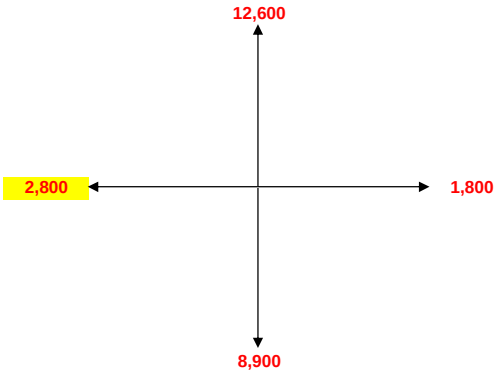
2016 Baseline Peak Hour Turning Movement Volumes (AM)



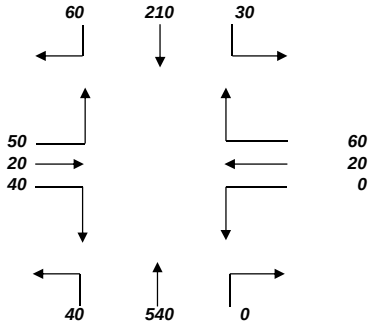
2016 Baseline ADTs



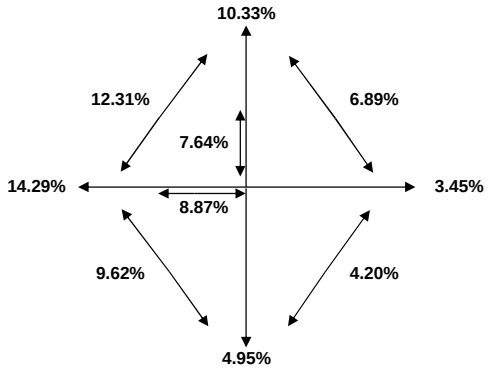
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

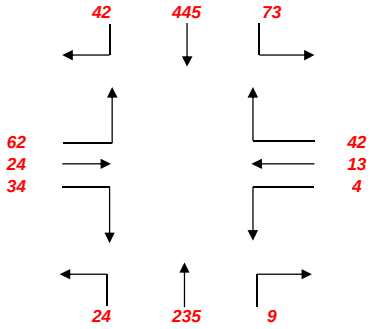


No Build Conditions

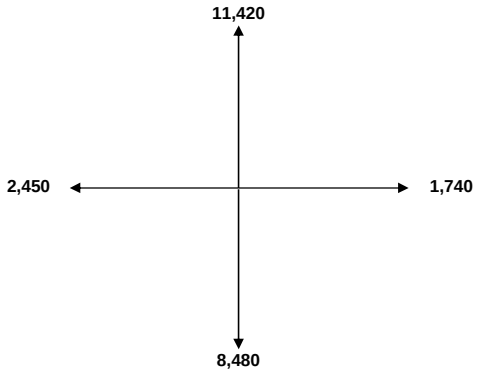
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

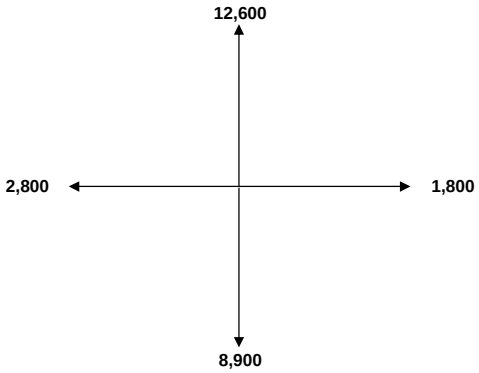
2016 Baseline Peak Hour Turning Movement Volumes (PM)



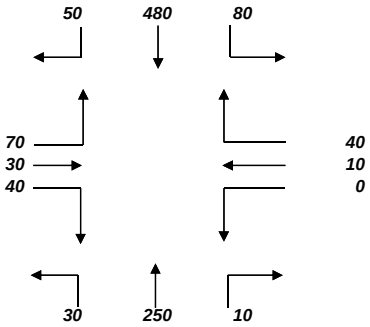
2016 Baseline ADTs



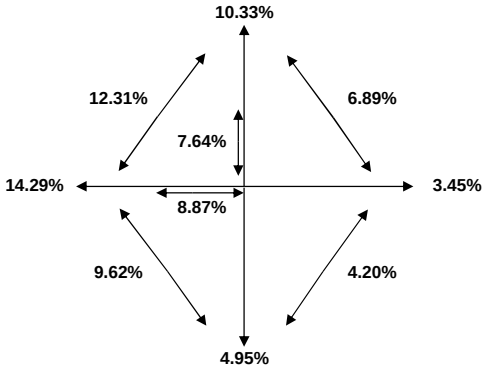
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

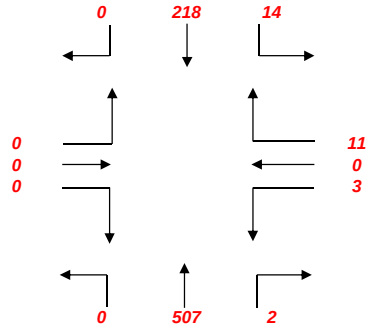


No Build Conditions

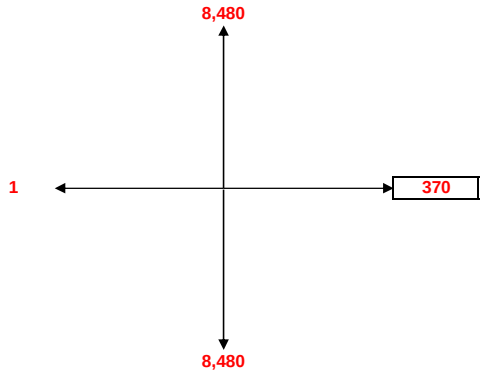
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

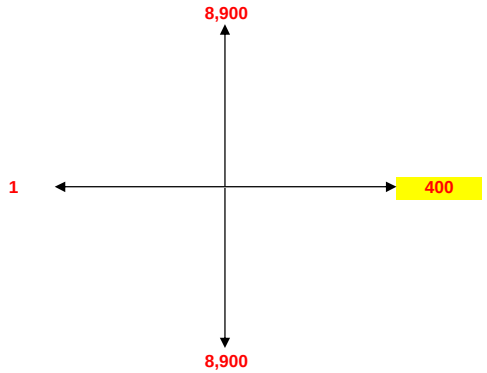
2016 Baseline Peak Hour Turning Movement Volumes (AM)



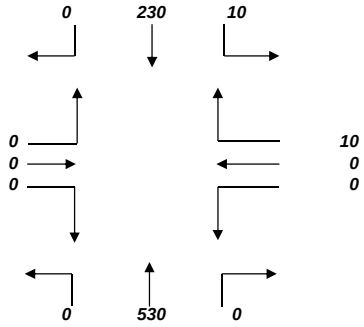
2016 Baseline ADTs



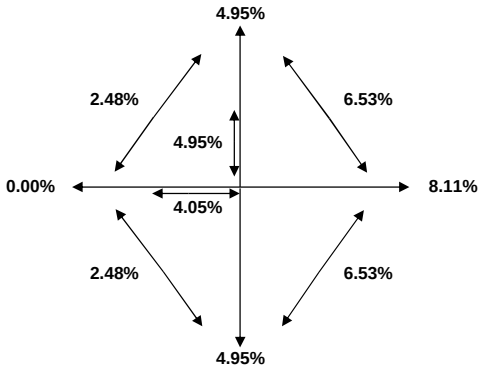
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

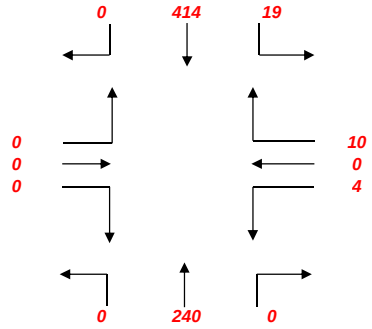


No Build Conditions

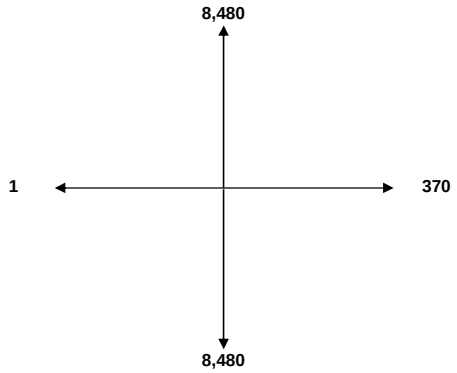
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

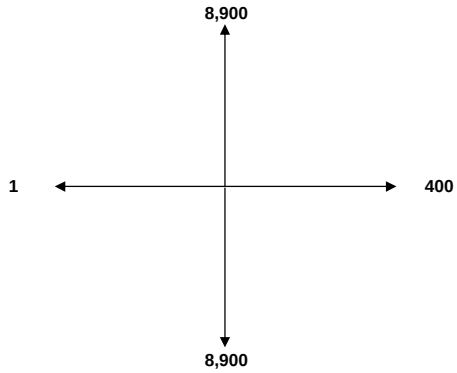
2016 Baseline Peak Hour Turning Movement Volumes (PM)



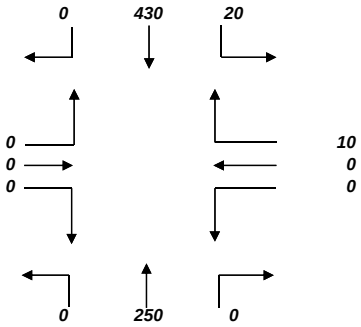
2016 Baseline ADTs



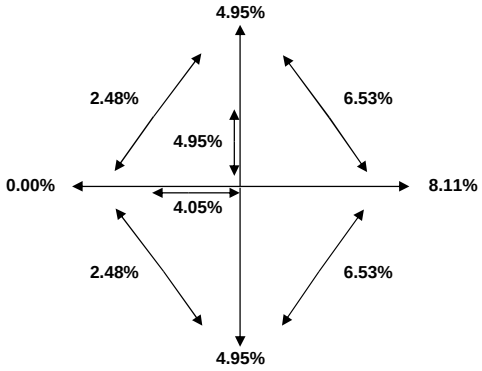
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

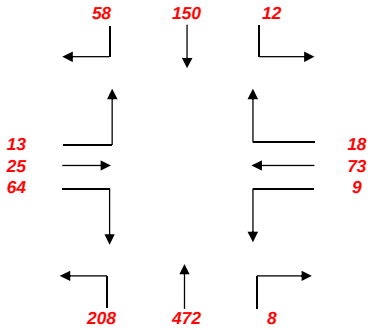


No Build Conditions

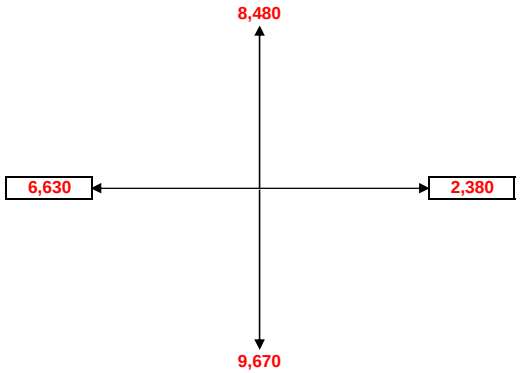
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

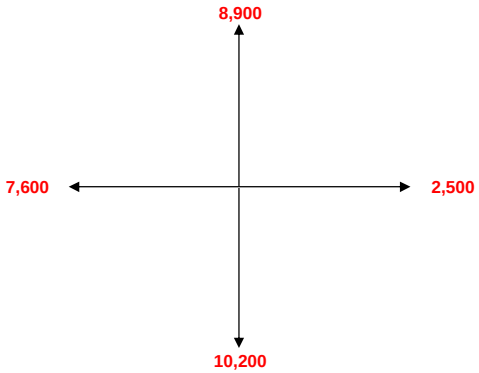
2016 Baseline Peak Hour Turning Movement Volumes (AM)



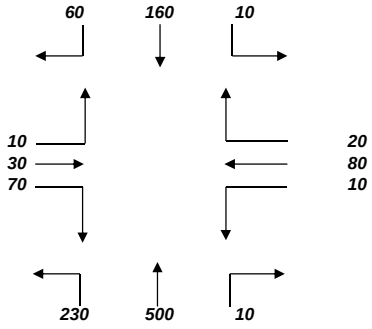
2016 Baseline ADTs



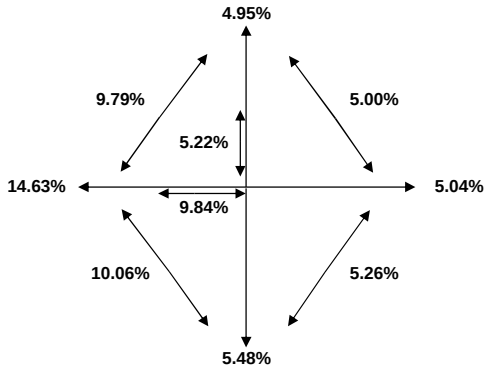
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

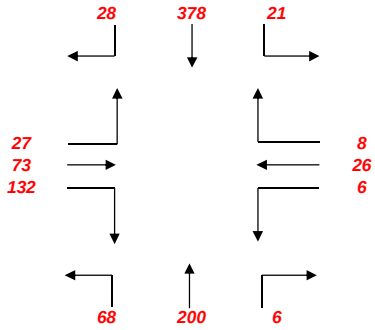


No Build Conditions

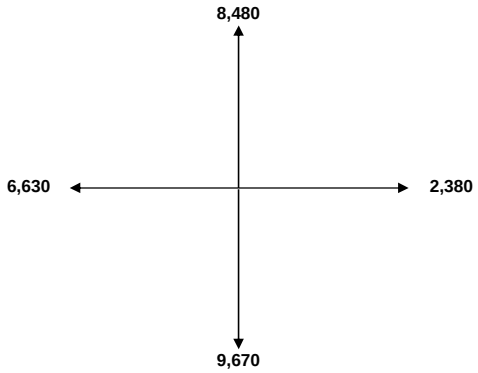
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

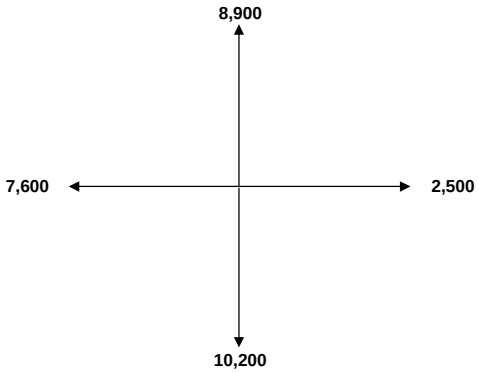
2016 Baseline Peak Hour Turning Movement Volumes (PM)



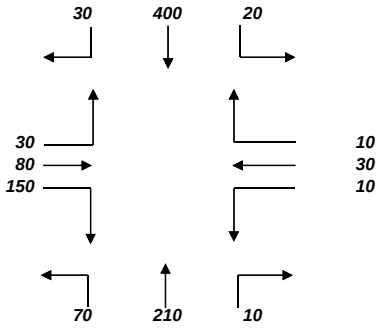
2016 Baseline ADTs



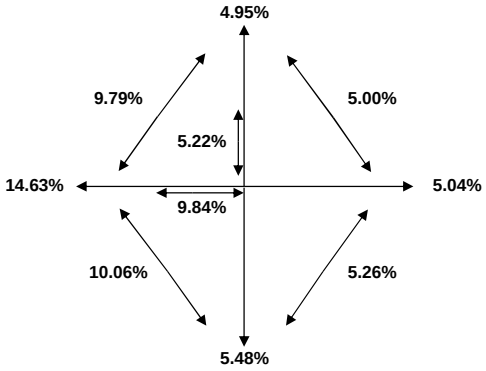
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

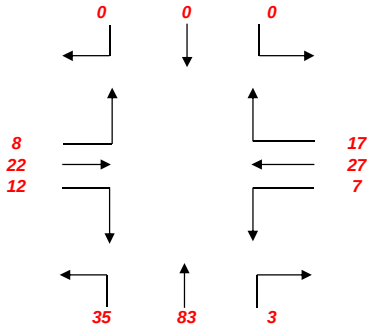


No Build Conditions

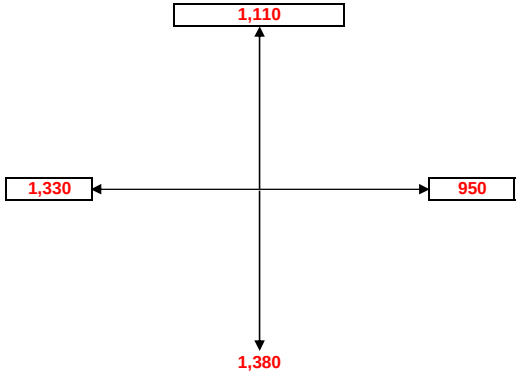
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

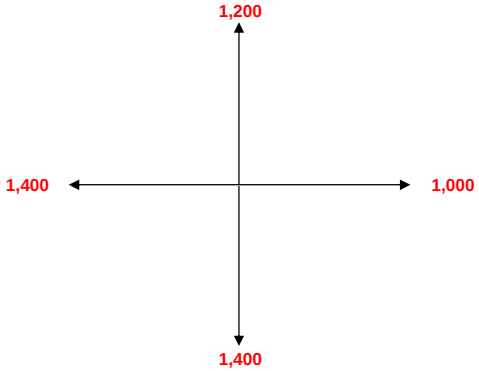
2016 Baseline Peak Hour Turning Movement Volumes (AM)



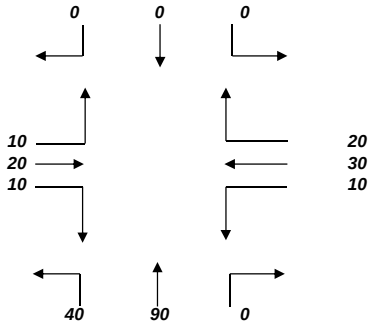
2016 Baseline ADTs



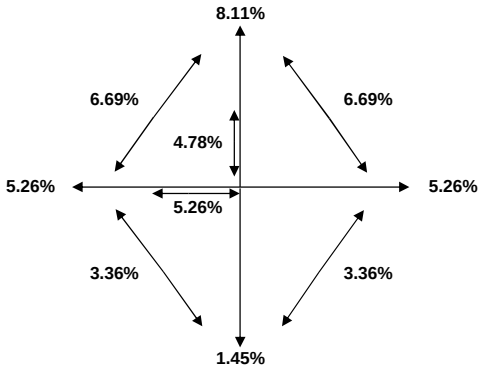
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

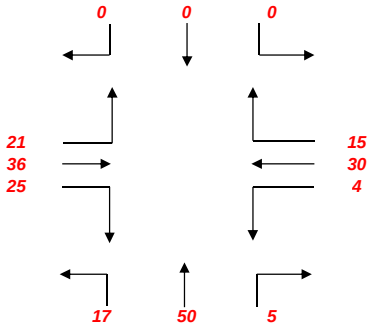


No Build Conditions

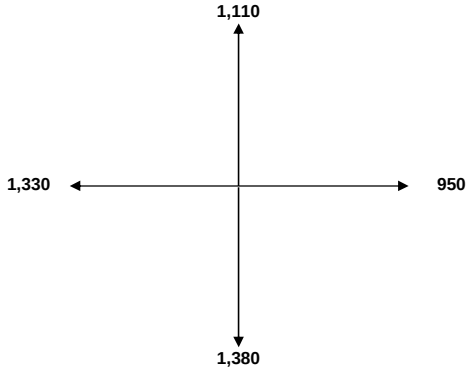
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

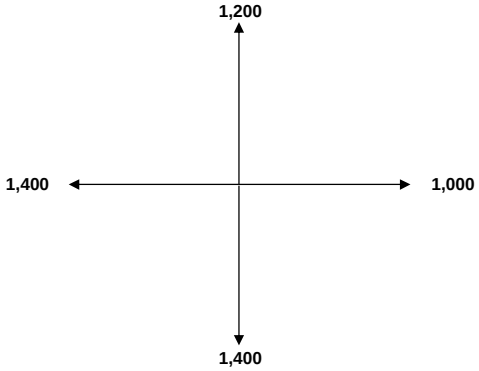
2016 Baseline Peak Hour Turning Movement Volumes (PM)



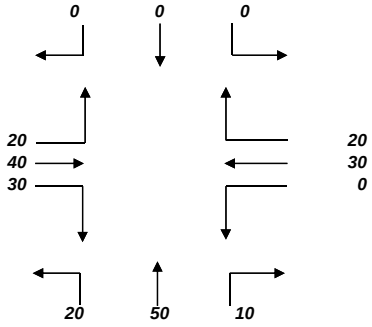
2016 Baseline ADTs



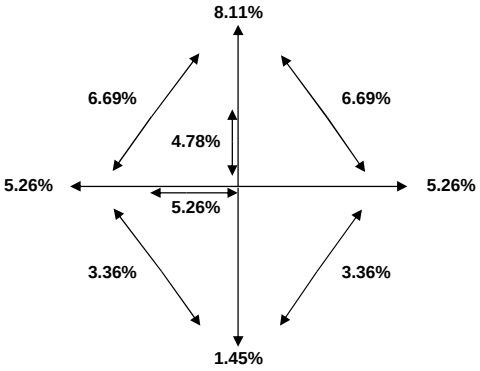
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

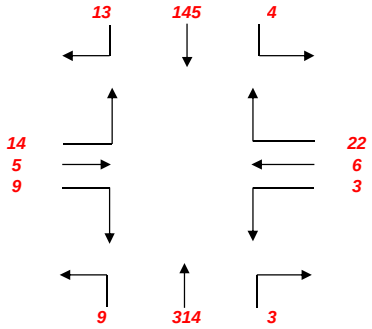


No Build Conditions

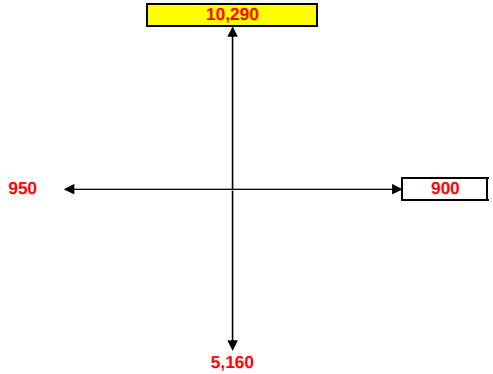
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

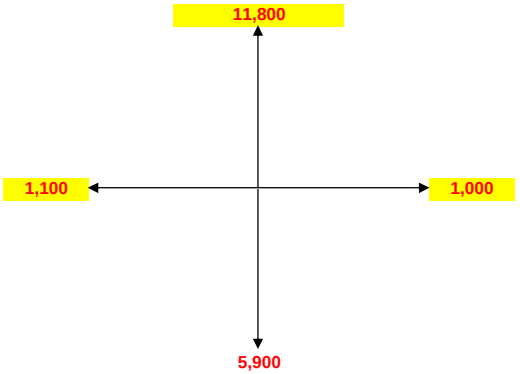
2016 Baseline Peak Hour Turning Movement Volumes (AM)



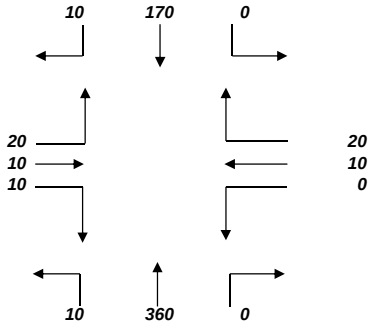
2016 Baseline ADTs



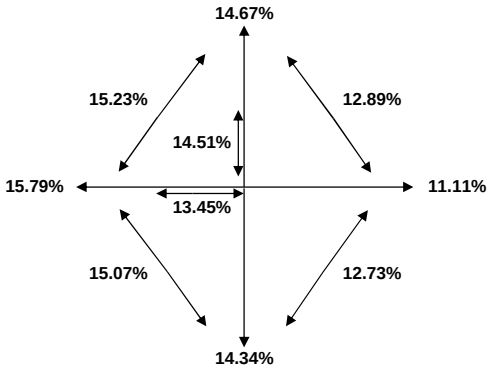
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

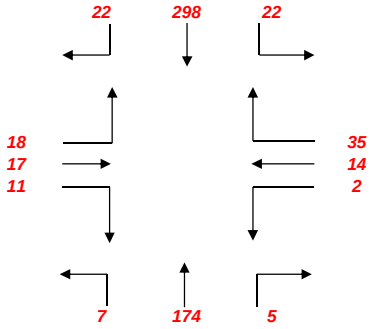


No Build Conditions

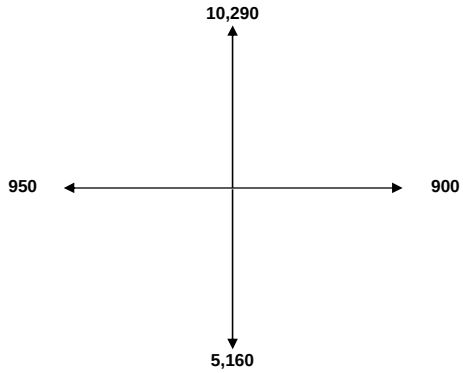
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

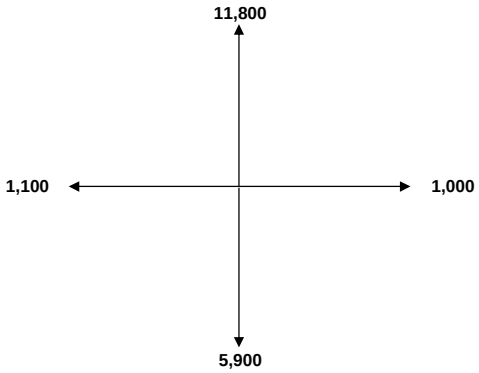
2016 Baseline Peak Hour Turning Movement Volumes (PM)



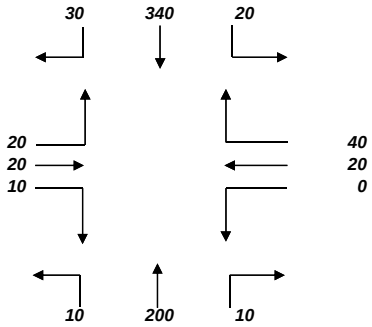
2016 Baseline ADTs



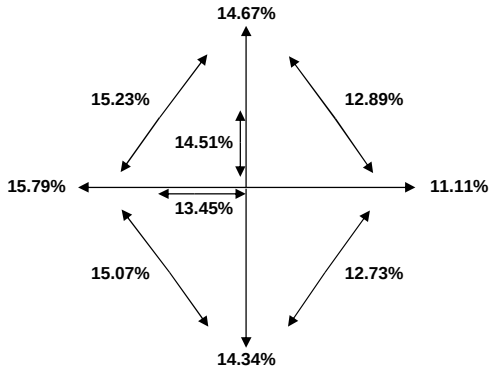
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

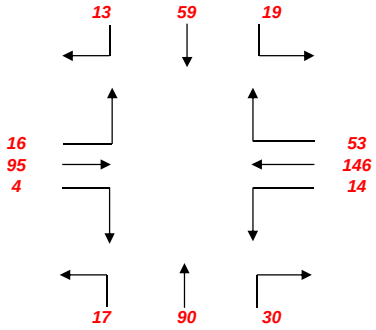


No Build Conditions

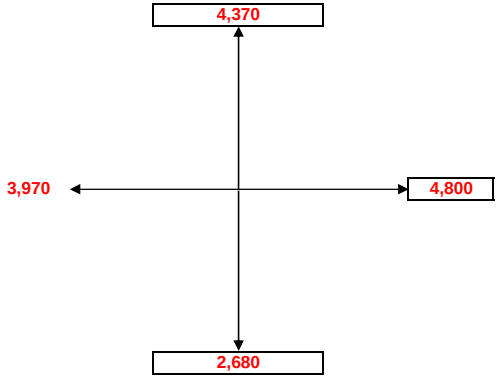
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

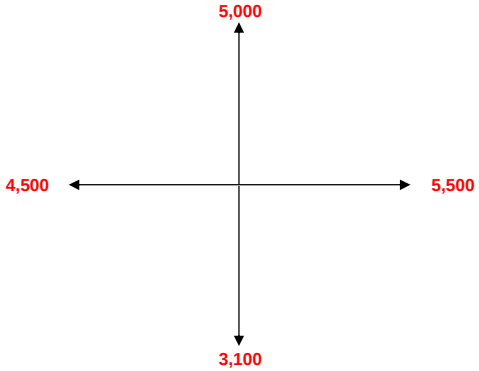
2016 Baseline Peak Hour Turning Movement Volumes (AM)



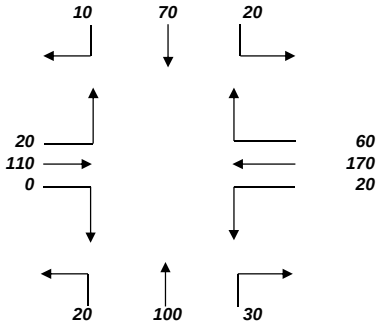
2016 Baseline ADTs



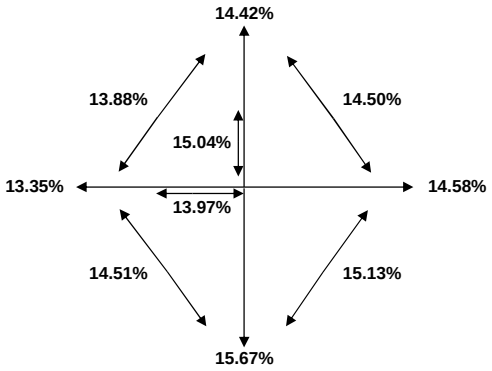
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

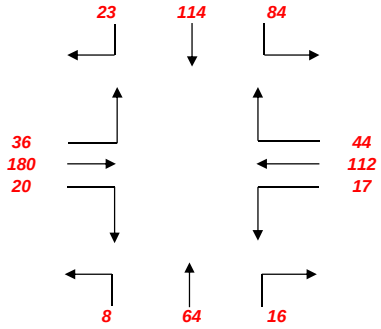


No Build Conditions

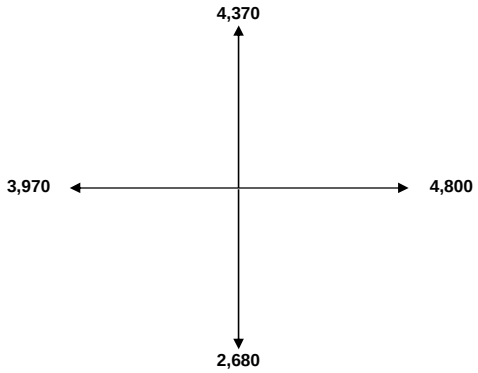
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

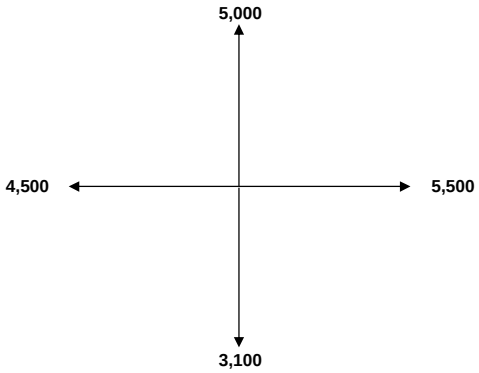
2016 Baseline Peak Hour Turning Movement Volumes (PM)



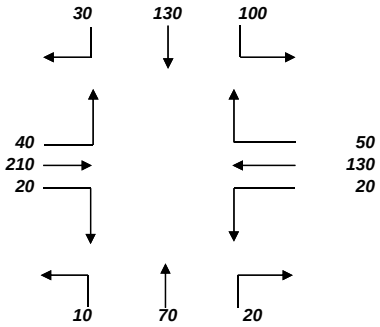
2016 Baseline ADTs



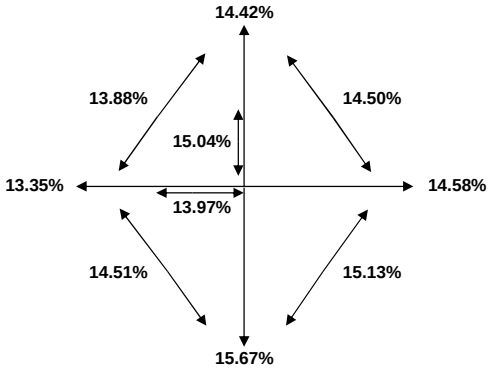
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

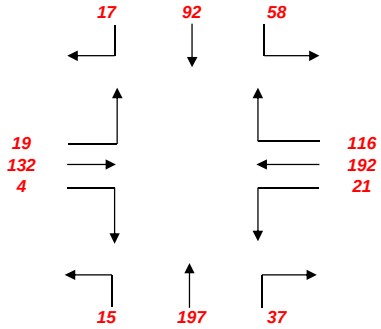


No Build Conditions

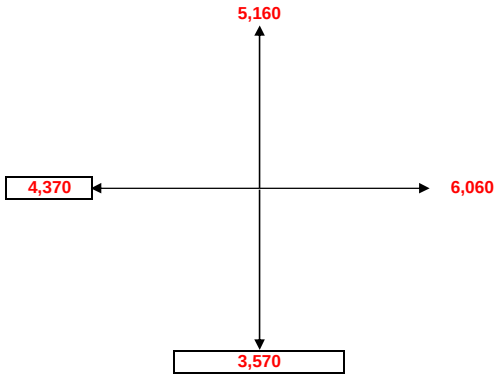
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

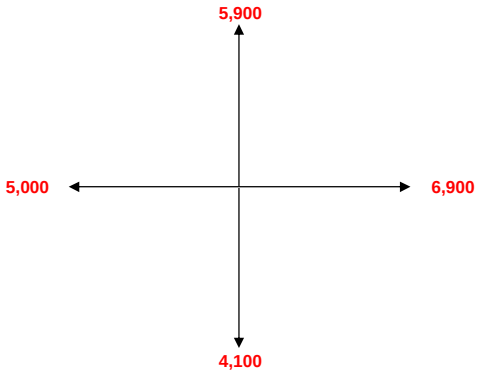
2016 Baseline Peak Hour Turning Movement Volumes (AM)



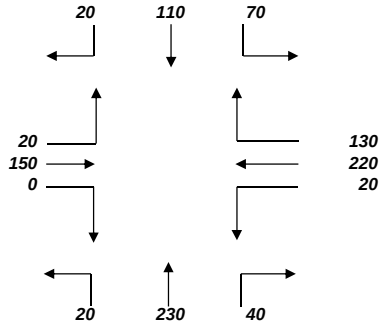
2016 Baseline ADTs



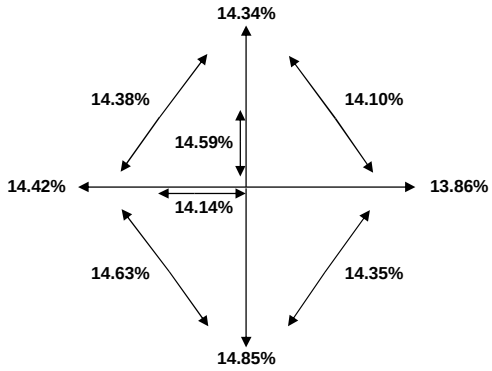
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

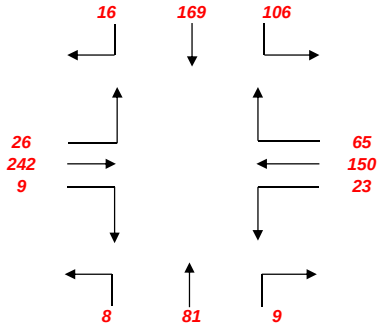


No Build Conditions

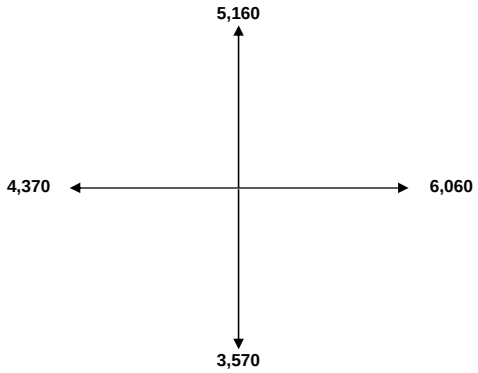
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

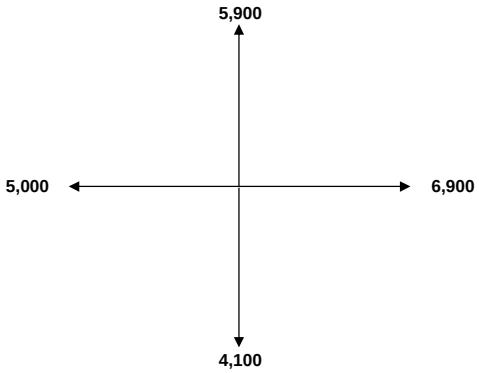
2016 Baseline Peak Hour Turning Movement Volumes (PM)



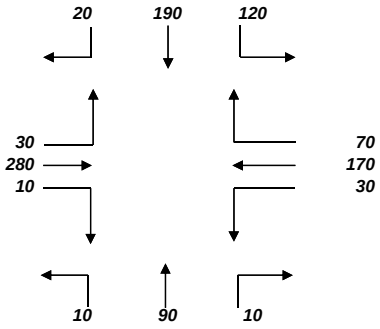
2016 Baseline ADTs



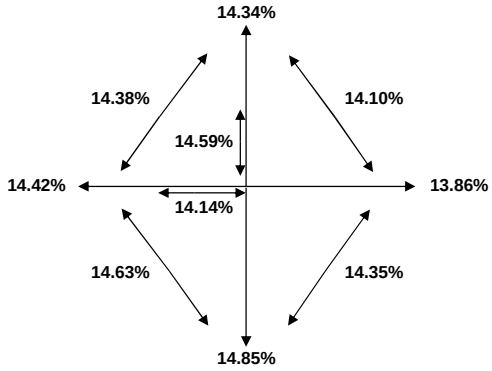
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease



APPENDIX H

2035 WITHOUT SPECIFIC PLAN TRIP GENERATION SUMMARY AND SERIES 13 NO BUILD FORECAST MODEL

RICK ENGINEERING COMPANY
Traffic Division

TABLE A
2035 NO BUILD TRAFFIC GENERATION
LEMON GROVE DOWNTOWN SPECIFIC PLAN

MGRA Zone	TAZ Zone	2035 No Build ADT
9395	3616	1500
9397		
9394	3612	2700
9398		
9399		
9241	3638	2600
9245		
9402	3636	4700
9404		
9405		
9406		
9385	3567	8600
9386		
9391		
9393		
9396		
9400		
9408	3577	7100
9413		
9414		
9416		
9422		
9410	3588	4800
9411		
9412		
9415		
9417		
9419		
9420		
9423		
9382	3559	800
9384	3562	2500
9387		
9392		
9381	3558	3700
9388		
	Total:	**39000**

Source: SANDAG Series 13 Forecast

SANDAG
SR 13

ABM Run
version13.3.2
Scenario ID: 709

2035 No Build
(regional model)

ADT Plot

Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones
hwy_load_709

\# Unadjusted ADT (x1000)
\# Adjusted ADT(x1000)

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N
0 0.045 0.09 0.135
Miles

SANDAG
servicebureau

Date: December 7, 2017

APPENDIX I

SANDAG SERIES 13
FORECAST MODELS

SANDAG
SR 13

ABM Run
version13.3.2
Scenario ID: 709

2035 No Build
(regional model)

ADT Plot

Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones
hwy_load_709

\# Unadjusted ADT (x1000)
\# Adjusted ADT(x1000)

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N
0 0.045 0.09 0.135
Miles

SANDAG
servicebureau

Date: December 7, 2017

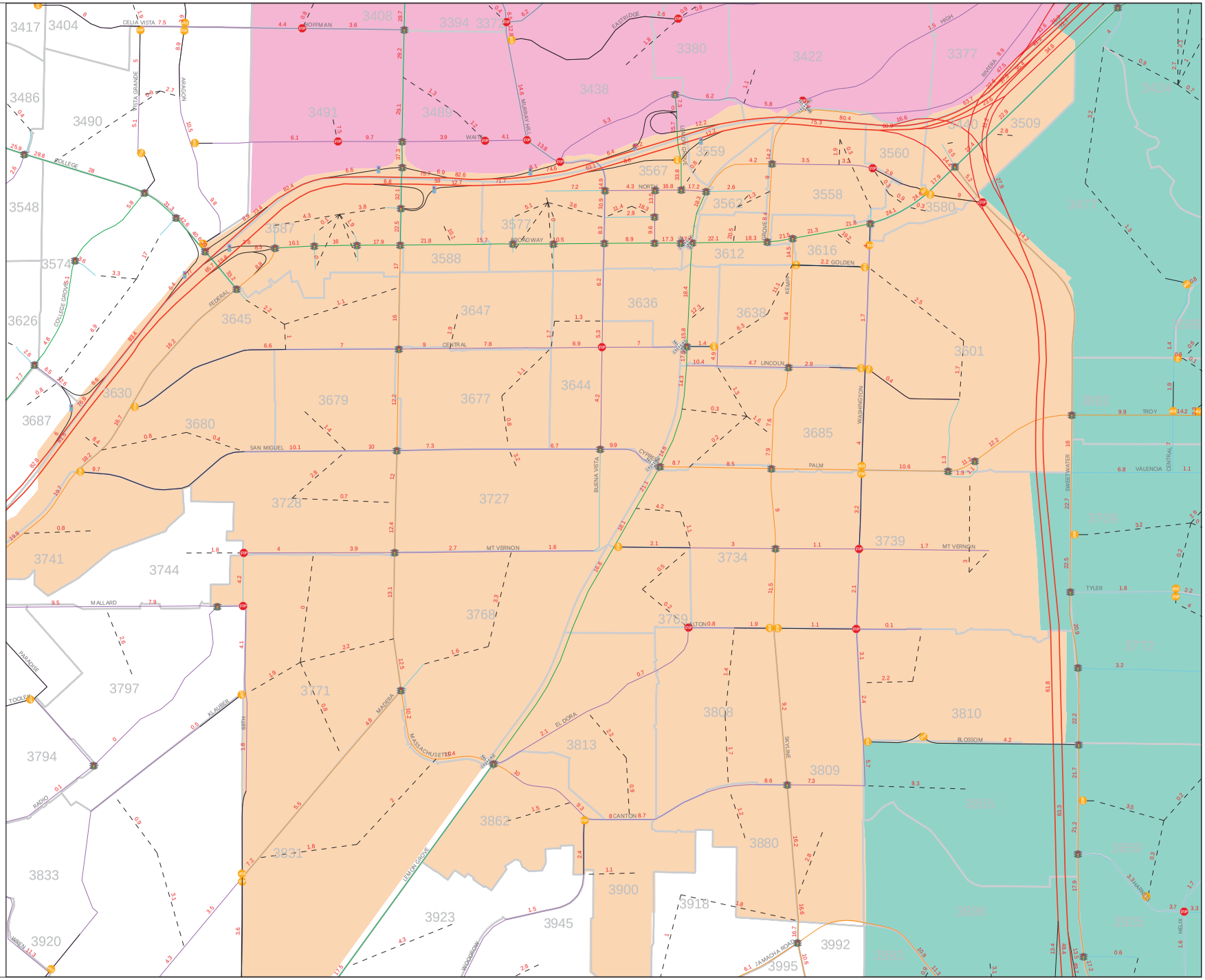
SANDAG
SR 13

ABM Run
version13.3.2
ScenarioID: 807

2035 Build

Downtown Village
Specific Plan

ADT Plot



Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones
hwy_load_807

\# Unadjusted ADT (x1000)
\# Adjusted ADT(x1000)

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N
0 0.045 0.09 0.135
Miles

SANDAG
servicebureau

Date: December 7, 2017

APPENDIX J

LAND USE BREAKDOWNS

Lemon Grove Specific Plan Area - Land Use Analysis

July, 2017

JN 17670-0

Land Use Area	Zoning District	Stories	Acres	Lot Coverage	Commercial S.F.	Office S.F.	Business S.F.	Residential S.F.	Residential Dwelling Units	
A-1	Village Comm'l	5	5.0	174,240	174,240	174,240	-	522,720	200	
A-2	Village Comm'l	5	4.9	170,755	170,755	170,755	-	512,265	196	
A-3	Village Comm'l	5	2.0	87,120	87,120	87,120	-	261,360	80	
A-4	Village Comm'l	3	0.3	10,454	10,454	-	-	20,908	9	
A-5	Village Comm'l	3	1.4	60,984	60,984	-	-	121,968	42	
A-6	Village Comm'l	3	1.8	62,726	62,726	-	-	125,452	54	
A-7	Village Comm'l	5	6.0	209,088	209,088	209,088	-	627,264	240	
A-8	Civic	2	16.2	282,269	-	564,538	-	-	-	
A-9	Neigh. Comm'l	2	4.2	73,181	146,362	-	-	-	-	
A-10	Neigh. Comm'l	2	2.8	48,787	97,574	-	-	-	-	
A-11	Neigh. Comm'l	2	1.6	27,878	55,756	-	-	-	-	
A-12	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21	
A-13	Transit MU	3	4.2	109,771	109,771	-	-	219,542	126	
A-14	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21	
A-15	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76	
A-16	Transit MU	5	3.9	101,930	101,930	101,930	-	305,790	156	
A-17	Transit MU	5	3.9	101,930	101,930	101,930	-	305,790	156	
A-18	Broadway MU	2	4.1	125,017	125,017	-	-	125,017	123	
A-19	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21	
A-20	Broadway MU	2	1.4	42,689	42,689	-	-	42,689	42	
A-21	Broadway MU	2	1.4	42,689	42,689	-		42,689	42	
A-22	Broadway MU	2	1.4	42,689	42,689	-	-	42,689	42	
A-23	Broadway MU	2	2.1	64,033	64,033	-	-	64,033	63	
A-24	Innovation	2	2.3	40,075	-	-	80,150	-	-	
A-25	Broadway MU	2	0.6	18,295	18,295	-		18,295	18	
A-26	Broadway MU	2	0.8	24,394	24,394	-		24,394	24	
A-27	Broadway MU	2	0.8	24,394	24,394	-		24,394	24	
A-28	Innovation	2	3.0	52,272	-	-	104,544	-	-	
A-29	Innovation	2	3.9	67,954	-	-	135,908	-	-	
A-30	Innovation	2	3.5	60,984	-	-	121,968	-	-	
A-31	Innovation	2	15.9	277,042	-	-	554,084	-	-	
A-32	Transit MU	5	1.5	39,204	39,204	39,204	-	117,612	60	
A-33	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76	
A-34	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76	
A-35	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76	
A-36	Transit MU	5	2.8	73,181	73,181	73,181	-	219,543	220	Existing
A-37	Transit MU	7	2.0	52,272	52,272	-	-	261,360		
A-38	Transit MU	5	2.0	52,272	52,272	52,272	-	156,816	80	
A-39	Transit MU	5	3.3	86,249	86,249	86,249	-	258,747	132	
A-40	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76	
A-41	Innovation	2	4.6	80,150	-	-	160,300	-	-	
A-42	Innovation	5	4.7	81,893	-	-	327,572	-	-	
A-43	Innovation	5	4.4	76,666	-	-	306,664	-	-	
A-44	Innovation	5	2.7	47,045	-	-	188,180	-	-	
A-45	Med-High Res.	2	8.4	146,362	-	-	-	-	75	Existing
A-46	Med-High Res.	2	5.1	88,862	-	-	-	-		
		Totals:		3,530,971	2,379,243	1,908,797	1,979,370	5,275,977	2,647	

Notes:

Densities:

- 2-3 Story: 30 du/ac. (1 & 2 floors.Res.)
- 5 Story: 40-50 du/ac. (3 floors. Res.)

Coverage:

- Neigh. Comm'l: 40%
- Broadway Mixed Use: 70%
- Transit Mixed Use: 60%
- Civic: 40%
- Village Commercial: 80%
- Innovation: 40%
- Med-High Residential: 40%

RICK ENGINEERING COMPANY
Traffic Division

LEMON GROVE DOWNTOWN VILLAGE SPECFIC PLAN
SANDAG SERIES 13 - FORECAST YEAR 2035 INPUTS
7/25/17

Land Use Area	yr	mgra	lu	lu_description	acres	Square Feet	hs_sf (single family DU)	hs_mf (multi-family DU)	hs_mh (mobile home)
A-1	2035	9395	1501	~~Hotel/Motel (Low-Rise)~~ RESIDENTIAL	~~0.411~~		0	~~11~~ 200	0
	2035	9395	4118	Road Right of Way	3.049		0	0	0
	2035	9395	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~3.633~~	174,240	0	0	0
	2035	9395		OFFICE		174,240	0	0	0
	2035	9395	5008	Service Station	~~0.968~~		0	0	0
A-2	2035	9397	4118	Road Right of Way	0.584		0	0	0
	2035	9397	5004	Neighborhood Shopping Center	~~2.883~~		0	0	0
	2035	9397	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~1.528~~	170,755	0	0	0
	2035	9397		OFFICE		170,755	0	0	0
	2035	9397	5008	Service Station	~~0.533~~		0	0	0
	2035	9397	9101	Multi-Family Residential Without Units	~~0.147~~		0	~~0~~ 196	0
A-3 / A-4 / A-5 / A-6	2035	9394	4118	Road Right of Way	2.955		0	0	0
	2035	9394	5004	Neighborhood Shopping Center	~~0.803~~		0	0	0
	2035	9394	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~3.146~~	221,284	0	~~2~~	0
	2035	9394	6002	Office (Low-Rise)	~~0.924~~	87,120	0	0	0
	2035	9394	6104	~~Post Office~~ RESIDENTIAL	~~0.727~~		0	~~0~~ 185	0
A-7	2035	9398	4118	Road Right of Way	4.502		0	0	0
	2035	9398	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~6.049~~	209,088	0	~~4~~ 240	0
	2035	9398		OFFICE		209,088	0	0	0
A-8	2035	9241	4118	Road Right of Way	1.837		0	0	0
	2035	9241	6805	Junior High School or Middle School	12.595		0	0	0
	2035	9241	6806	Elementary School	3.6		0	0	0
	2035	9241		OFFICE		564,538	0	0	0
A-9	2035	9402	4117	Railroad Right of Way	0.988		0	0	0
	2035	9402	4118	Road Right of Way	1.484		0	0	0
	2035	9402	5004	Neighborhood Shopping Center	~~4.484~~	146,362	0	0	0
A-10	2035	9406	4117	Railroad Right of Way	0.793		0	0	0
	2035	9406	4118	Road Right of Way	1.351		0	0	0
	2035	9406	5004	~~Neighborhood Shopping Center~~ COMMERCIAL RETAIL	~~2.182~~	97,574	0	0	0
	2035	9406	6109	Other Public Services	~~0.201~~		0	0	0
	2035	9406	7601	Park - Active	0.315		0	0	0
A-11	2035	9245	4118	Road Right of Way	0.535		0	0	0
	2035	9245	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~0.139~~	55,756	0	0	0
	2035	9245	6105	Fire/Police Station	1.205		0	0	0
	2035	9245	9101	Vacant and Undeveloped Land	~~0.22~~		0	0	0
A-12 / A-13	2035	9405	101	~~Single Family Multiple Units~~ COMMERCIAL RETAIL	~~0.545~~	54,885	6	0	0
	2035	9405	1200	Multi-Family Residential	~~0.147~~		0	~~3~~ 63	0
	2035	9405	4117	Railroad Right of Way	0.312		0	0	0
	2035	9405	4118	Road Right of Way	0.733		0	0	0
	2035	9405	7601	Park - Active	~~1.671~~		0	~~2~~	0

RICK ENGINEERING COMPANY
Traffic Division

LEMON GROVE DOWNTOWN VILLAGE SPECFIC PLAN
SANDAG SERIES 13 - FORECAST YEAR 2035 INPUTS
7/25/17

Land Use Area	yr	mgra	lu	lu_description	acres	Square Feet	hs_sf (single family DU)	hs_mf (multi-family DU)	hs_mh (mobile home)
A-13 / A-14	2035	9404	101	Single Family Multiple-Units	~~0.227~~		~~2~~	0	0
	2035	9404	1200	Multi-Family Residential	~~0.52~~		0	~~20~~ 105	0
	2035	9404	4118	Road Right of Way	1.908		0	0	0
	2035	9404	6105	Fire/Police Station	1.642		0	0	0
	2035	9404	9700	~~Mixed Use~~ COMMERCIAL RETAIL	~~0.828~~	91,476	0	~~1~~	0
A-15	2035	9399	4118	Road Right of Way	0.738		0	0	0
	2035	9399	5009	~~Other Retail Trade and Strip Commercial~~ RESIDENTIAL	~~0.836~~		0	~~0~~ 76	0
	2035	9399	9700	~~Mixed Use~~ COMMERCIAL RETAIL	~~1.075~~	49,658	0	0	0
	2035	9399		OFFICE		49,658	0	0	0
A-16	2035	9400	4118	Road Right of Way	0.412		0	0	0
	2035	9400	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL	~~0.225~~	101,930	0	0	0
	2035	9400		OFFICE		101,930	0	0	0
	2035	9400	9700	~~Mixed Use~~ RESIDENTIAL	~~3.626~~		0	~~0~~ 156	0
A-17	2035	9422	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~3.865~~	101,930	0	~~120~~ 156	0
	2035	9422		OFFICE		101,930	0	0	0
A-18	2035	9416	4118	Road Right of Way	2.181		0	0	0
	2035	9416	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~4.092~~	125,017	0	~~139~~ 123	0
A-19	2035	9420	1200	Multi-Family Residential	~~0.366~~		0	~~24~~ 21	0
	2035	9420	4118	Road Right of Way	0.446		0	0	0
	2035	9420	9700	~~Mixed Use~~ COMMERCIAL RETAIL	~~0.314~~	18,295	0	~~12~~	0
A-20	2035	9417	4118	Road Right of Way	0.428		0	0	0
	2035	9417	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~1.426~~	42,689	0	~~44~~ 42	0
A-21	2035	9415	4118	Road Right of Way	0.841		0	0	0
	2035	9415	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~1.415~~	42,689	0	~~45~~ 42	0
A-22	2035	9423	4118	Road Right of Way	0.332		0	0	0
	2035	9423	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~1.406~~	42,689	0	~~43~~ 42	0
A-23	2035	9419	4118	Road Right of Way	0.873		0	0	0
	2035	9419	5008	Service Station	~~1.026~~		0	~~0~~	0
	2035	9419	9700	~~Mixed Use~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~1.053~~	64,033	0	~~43~~ 63	0
A-24	2035	9410	4118	Road Right of Way	0.702		0	0	0
	2035	9410	5004	~~Neighborhood Shopping Center~~ LIGHT INDUSTRIAL	~~2.305~~	80,150	0	0	0
A-25 / A-28	2035	9411	101	~~Single Family Detached~~ RESIDENTIAL	~~0.161~~		~~1~~	~~0~~ 18	0
	2035	9411	2103	Light Industry - General	~~0.159~~	104,544	0	0	0
	2035	9411	4118	Road Right of Way	2.498		0	0	0
	2035	9411	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~0.643~~	18,295	0	0	0
	2035	9411	5009	Other Retail Trade and Strip Commercial	~~2.672~~		0	~~2~~	0
A-26 / A-29	2035	9412	4118	Road Right of Way	1.03		0	0	0
	2035	9412	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~1.205~~	24,394	0	~~0~~ 24	0
	2035	9412	5009	~~Other Retail Trade and Strip Commercial~~ LIGHT INDUSTRIAL	~~3.577~~	135,908	0	~~4~~	0

RICK ENGINEERING COMPANY
Traffic Division

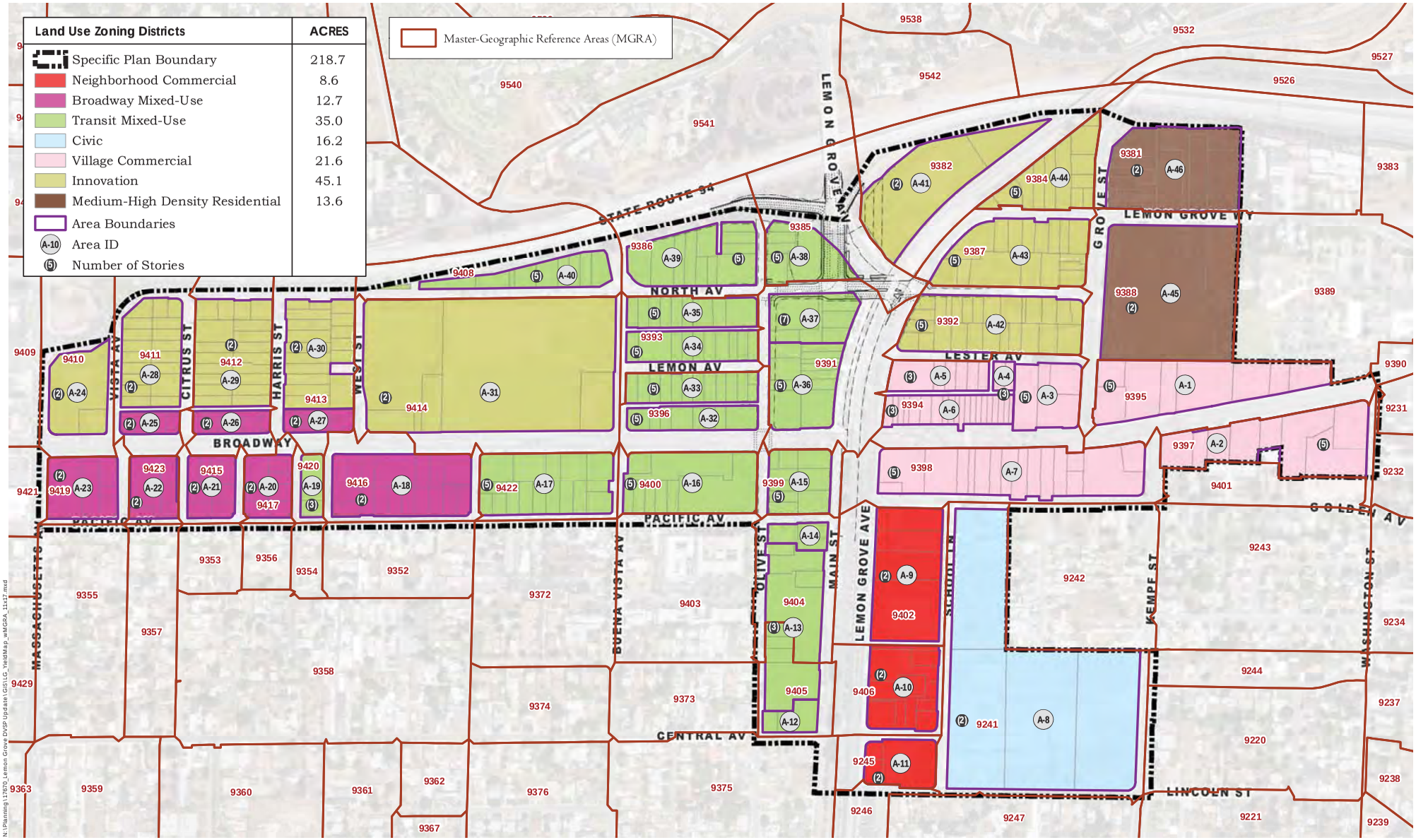
LEMON GROVE DOWNTOWN VILLAGE SPECFIC PLAN
SANDAG SERIES 13 - FORECAST YEAR 2035 INPUTS
7/25/17

Land Use Area	yr	mgra	lu	lu_description	acres	Square Feet	hs_sf (single family DU)	hs_mf (multi-family DU)	hs_mh (mobile home)
A-27 / A-30	2035	9413	101	~~Single Family Multiple Units~~ RESIDENTIAL	~~0.149~~		~~2~~	~~0~~ 24	0
	2035	9413	2103	Light Industry - General	~~0.457~~	121,968	0	0	0
	2035	9413	4114	Parking Lot - Surface	0.248		0	0	0
	2035	9413	4118	Road Right of Way	2.148		0	0	0
	2035	9413	5007	~~Arterial Commercial~~ COMMERCIAL RETAIL	~~0.537~~	24,394	0	0	0
	2035	9413	5009	Other Retail Trade and Strip Commercial	~~2.866~~		0	0	0
A-31	2035	9414	1501	Hotel/Motel (Low-Rise)	~~0.553~~		0	0	0
	2035	9414	4118	Road Right of Way	3.001		0	0	0
	2035	9414	5003	~~Community Shopping Center~~ LIGHT INDUSTRIAL	~~14.425~~	554,084	0	~~1~~	0
	2035	9414	5007	Arterial Commercial	~~0.936~~		0	0	0
A-32 / A-33	2035	9396	4118	Road Right of Way	2.237		0	0	0
	2035	9396	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL	~~0.46~~	88,862	0	~~1~~	0
	2035	9396		OFFICE		88,862	0	0	0
	2035	9396	9700	~~Mixed Use~~ RESIDENTIAL	~~2.918~~		0	~~0~~ 136	0
A-34 / A-35	2035	9393	101	~~Single Family Detached~~ RESIDENTIAL	~~0.112~~		~~1~~	~~0~~ 152	0
	2035	9393	4118	Road Right of Way	1.324		0	0	0
	2035	9393	5009	Other Retail Trade and Strip Commercial	~~0.814~~		0	~~1~~	0
	2035	9393	9700	~~Mixed Use~~ COMMERCIAL RETAIL	~~2.936~~	99,316	0	~~20~~	0
	2035	9393		OFFICE		99,316	0	0	0
A-36 / A-37	2035	9391	4111	Rail Station/Transit Center	0.363		0	0	0
	2035	9391	4117	Railroad Right of Way	0.746		0	0	0
	2035	9391	4118	Road Right of Way	4.061		0	0	0
	2035	9391	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL	~~0.253~~	125,453	0	0	0
	2035	9391	9700	~~Mixed Use~~ RESIDENTIAL	~~4.523~~		0	~~136~~ 220	0
	2035	9391		OFFICE		73,181	0	0	0
A-38	2035	9385	4112	Freeway	6.572		0	0	0
	2035	9385	4118	Road Right of Way	2.264		0	0	0
	2035	9385	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL	~~1.111~~	52,272	0	0	0
	2035	9385		OFFICE		52,272	0	0	0
	2035	9385	9101	~~Vacant and Undeveloped Land~~ RESIDENTIAL	~~0.881~~		0	~~0~~ 80	0
A-39	2035	9386	4118	Road Right of Way	0.861		0	0	0
	2035	9386	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL AND RESIDENTIAL	~~3.27~~	86,249	0	~~1~~ 132	0
	2035	9386		OFFICE		86,249	0	0	0
A-40	2035	9408	1200	Multi-Family Residential	~~0.277~~		0	~~11~~ 76	0
	2035	9408	4118	Road Right of Way	1.748		0	0	0
	2035	9408	5009	~~Other Retail Trade and Strip Commercial~~ COMMERCIAL RETAIL	~~1.646~~	49,658	0	0	0
	2035	9408		OFFICE		49,658	0	0	0
A-41	2035	9382	4112	Freeway	0.911		0	0	0
	2035	9382	4117	Railroad Right of Way	2.597		0	0	0
	2035	9382	5006	~~Automobile Dealership~~ LIGHT INDUSTRIAL	~~4.633~~	160,300	0	0	0

RICK ENGINEERING COMPANY
Traffic Division

LEMON GROVE DOWNTOWN VILLAGE SPECFIC PLAN
SANDAG SERIES 13 - FORECAST YEAR 2035 INPUTS
7/25/17

Land Use Area	yr	mgra	lu	lu_description	acres	Square Feet	hs_sf (single family DU)	hs_mf (multi-family DU)	hs_mh (mobile home)
A-42	2035	9392	101	Single Family Multiple-Units	~~0.58~~		~~6~~	0	0
	2035	9392	101	Single Family Detached	~~0.14~~		~~1~~	0	0
	2035	9392	1200	Multi-Family Residential	~~0.128~~		0	~~4~~	0
	2035	9392	2103	Light Industry - General	~~0.277~~	327,572	0	0	0
	2035	9392	4118	Road Right of Way	1.26		0	0	0
	2035	9392	5007	Arterial Commercial	~~1.029~~		0	~~1~~	0
	2035	9392	5009	Other Retail Trade and Strip Commercial	~~1.557~~		0	0	0
	2035	9392	6002	Office (Low-Rise)	~~1.015~~		0	0	0
A-43	2035	9387	101	Single Family Detached	~~0.225~~		~~1~~	0	0
	2035	9387	101	Single Family Multiple-Units	~~0.218~~		~~8~~	0	0
	2035	9387	103	Mobile Home Park	~~1.148~~		0	0	~~36~~
	2035	9387	2103	Light Industry - General	~~1.087~~	306,664	0	~~1~~	0
	2035	9387	4118	Road Right of Way	1.16		0	0	0
	2035	9387	5009	Other Retail Trade and Strip Commercial	~~1.724~~		0	~~2~~	0
A-44	2035	9384	101	Single Family Detached	~~0.155~~		~~1~~	0	0
	2035	9384	5009	~~Other Retail Trade and Strip Commercial~~ LIGHT INDUSTRIAL	~~2.592~~	188,180	0	0	0
A-45	2035	9388	1200	Multi-Family Residential	~~7.365~~		0	~~161~~ 38	0
	2035	9388	4118	Road Right of Way	3.295		0	0	0
	2035	9388	5009	Other Retail Trade and Strip Commercial	~~1.079~~		0	0	0
A-46	2035	9381	101	Single Family Multiple-Units	~~1.342~~		~~9~~	0	0
	2035	9381	101	Single Family Detached	~~2.788~~		~~14~~	0	0
	2035	9381	1200	Multi-Family Residential	~~5.264~~		0	~~123~~ 37	0
	2035	9381	4112	Freeway	8.345		0	0	0



RICK ENGINEERING COMPANY

Scale in Feet
0 400 800
North

Date of Exhibit: 7/7/2017
ESRI World Imagery Basemap

Yield Map with Master-Geographic Reference Areas (MGRA)

N:\Planning\17670_Lemon Grove DVSP Update\GIS\LG_YieldMap_wMGRA_11x17.mxd

APPENDIX K

2035 WITH SPECIFIC PLAN TRIP GENERATION SUMMARY AND SERIES 13 BUILD FORECAST MODEL

RICK ENGINEERING COMPANY
Traffic Division

TABLE B
2035 WITH SPECIFIC PLAN TRAFFIC GENERATION
LEMON GROVE DOWNTOWN SPECIFIC PLAN

MGRA Zone	TAZ Zone	2035 No Build ADT	2035 with Specific Plan ADT	Difference
9395	3616	1500	19200	17700
9397				
9394	3612	2700	20500	17800
9398				
9399				
9241	3638	2600	17400	14800
9245				
9402	3636	4700	12300	7600
9404				
9405				
9406				
9385	3567	8600	29700	21100
9386				
9391				
9393				
9396				
9400				
9408	3577	7100	8700	1600
9413				
9414				
9416				
9422				
9410	3588	4800	10100	5300
9411				
9412				
9415				
9417				
9419				
9420				
9423				
9382	3559	800	800	0
9384	3562	2500	1300	-1200
9387				
9392				
9381	3558	3700	2500	-1200
9388				
	Total:	**39000**	**122500**	**83500**

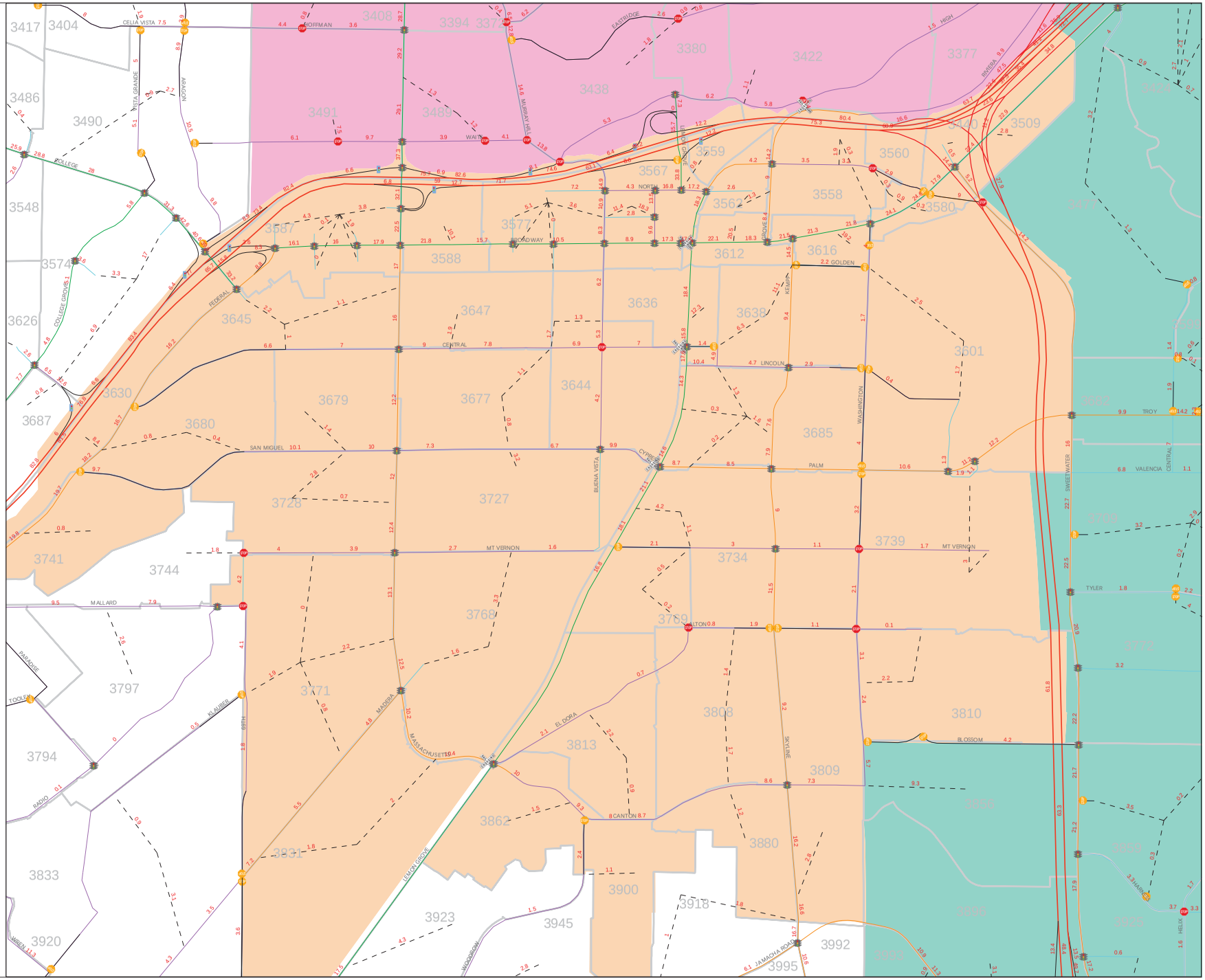
SANDAG
SR 13

ABM Run
version13.3.2
ScenarioID: 807

2035 Build

Downtown Village
Specific Plan

ADT Plot



Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones
hwy_load_807

\# Unadjusted ADT (x1000)
\# Adjusted ADT(x1000)

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N
0 0.045 0.09 0.135
Miles

SANDAG
servicebureau

Date: December 7, 2017

APPENDIX L

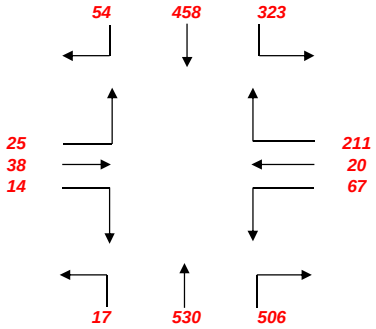
2035 WITH SPECIFIC PLAN FORECASTED TRAFFIC VOLUMES

Build Conditions

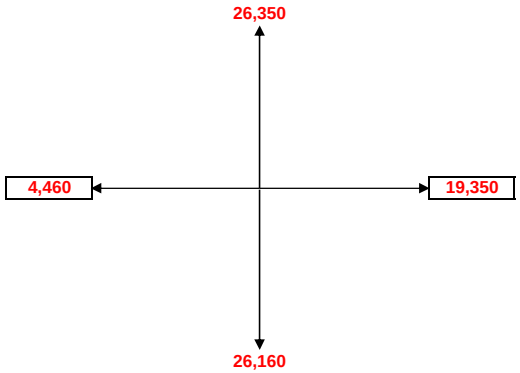
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbound Ramps

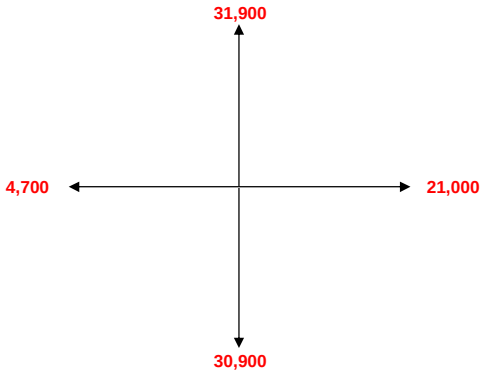
2016 Baseline Peak Hour Turning Movement Volumes (AM)



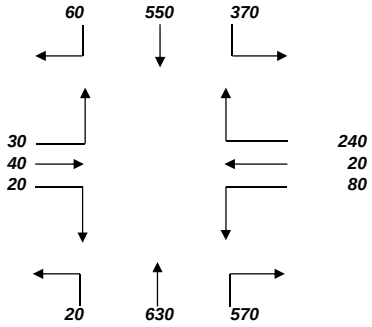
2016 Baseline ADTs



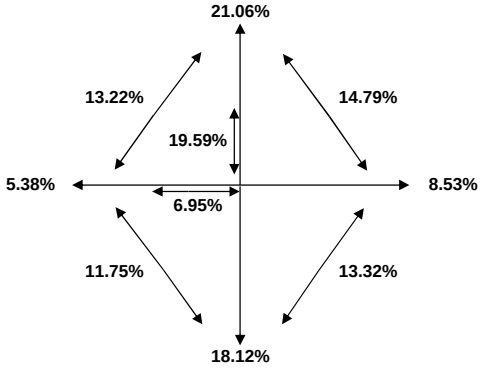
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

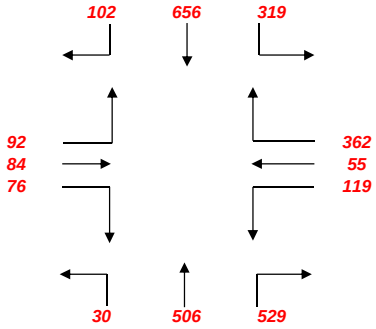


Build Conditions

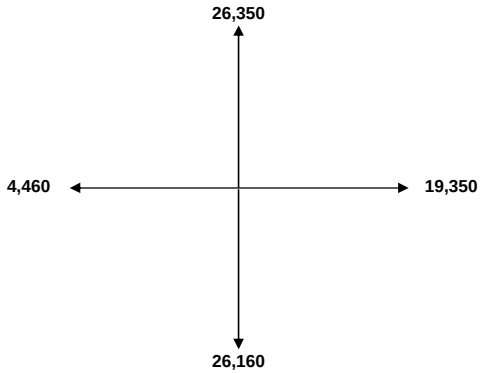
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbo

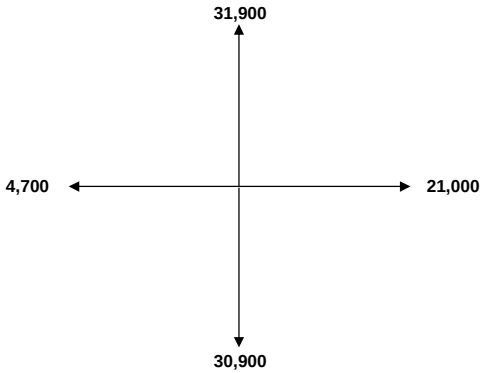
2016 Baseline Peak Hour Turning Movement Volumes (PM)



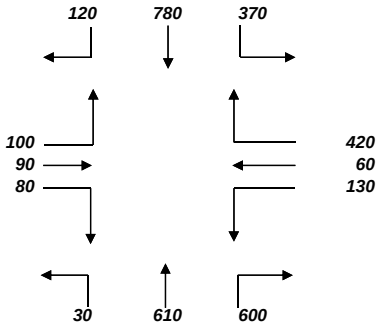
2016 Baseline ADTs



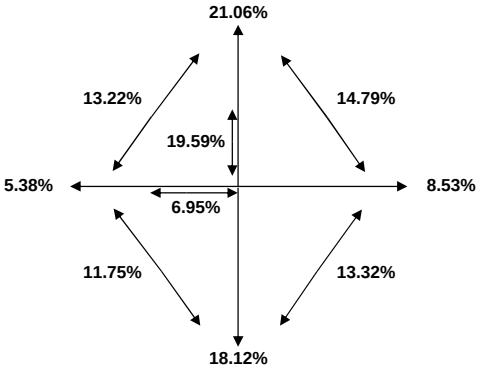
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

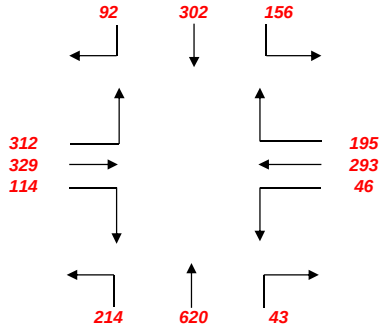


Build Conditions

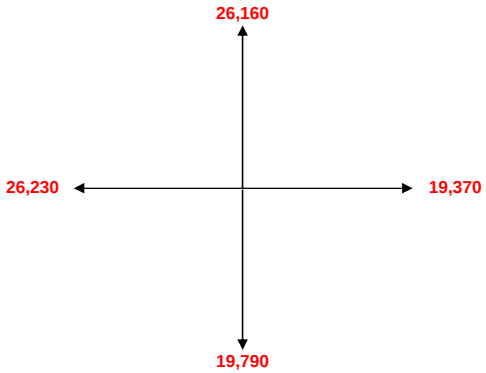
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

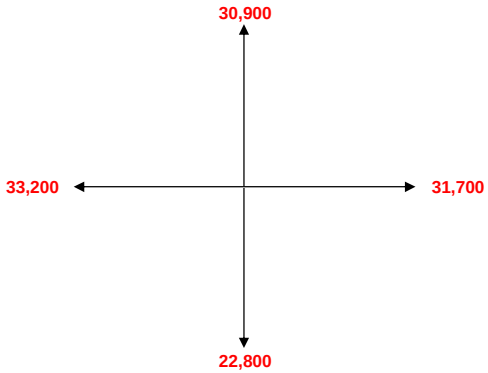
2016 Baseline Peak Hour Turning Movement Volumes (AM)



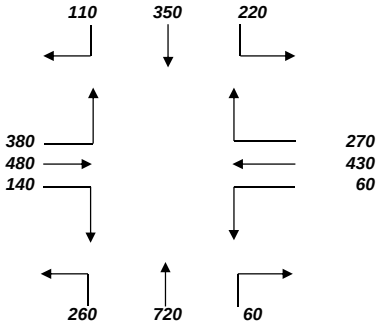
2016 Baseline ADTs



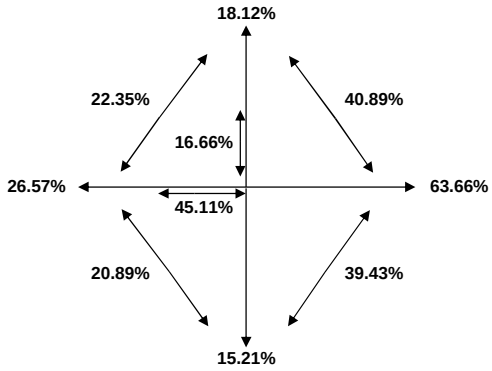
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

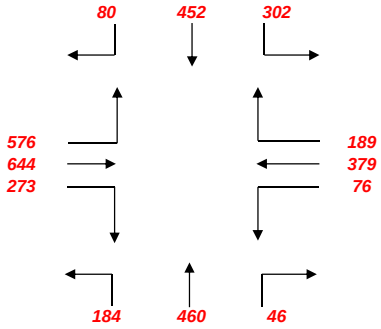


Build Conditions

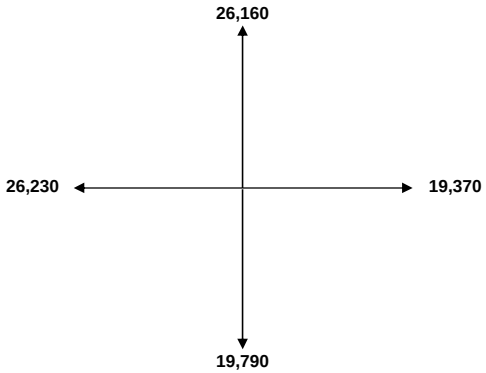
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

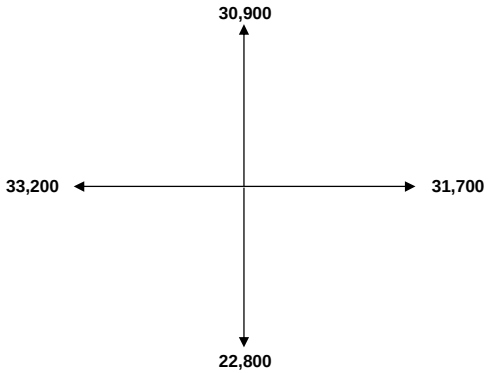
2016 Baseline Peak Hour Turning Movement Volumes (PM)



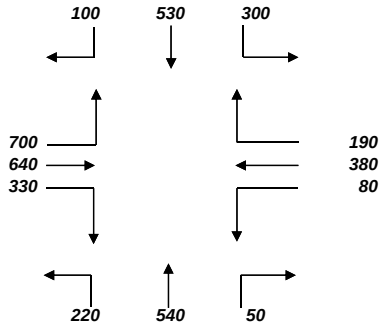
2016 Baseline ADTs



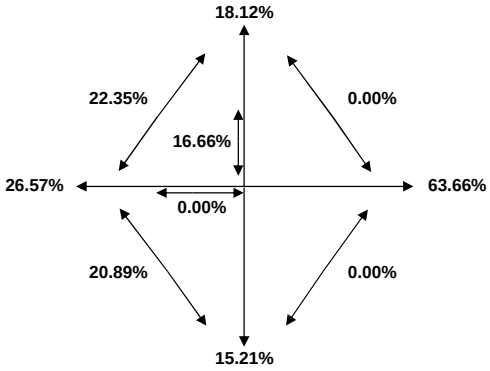
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

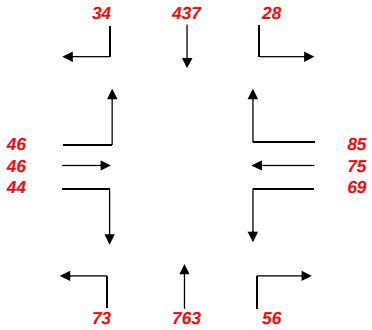


Build Conditions

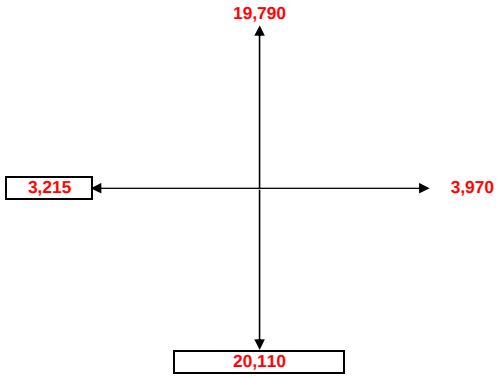
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

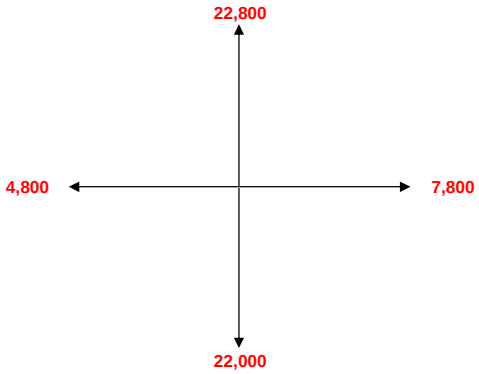
2016 Baseline Peak Hour Turning Movement Volumes (AM)



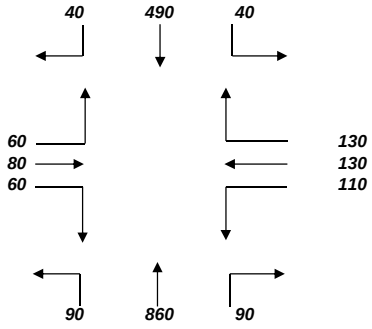
2016 Baseline ADTs



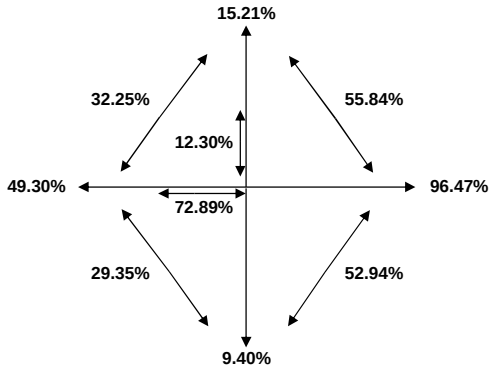
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

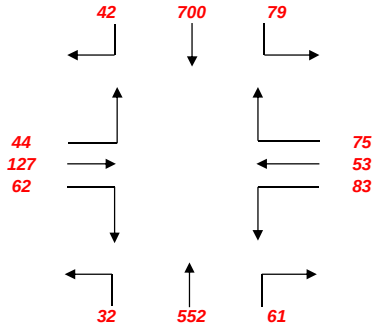


Build Conditions

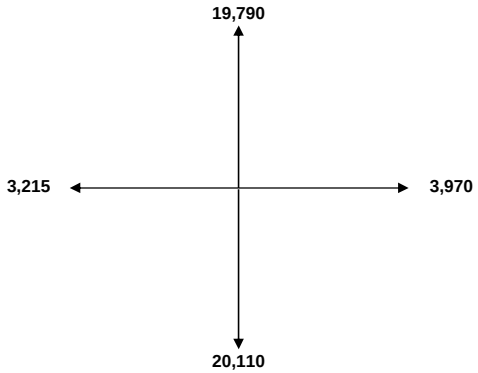
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

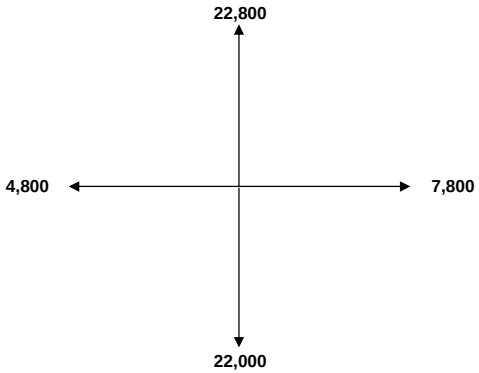
2016 Baseline Peak Hour Turning Movement Volumes (PM)



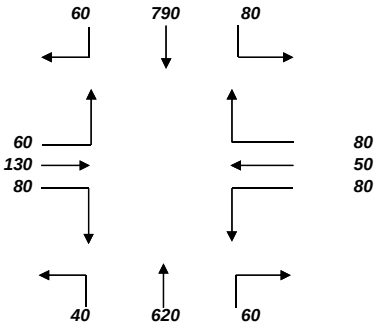
2016 Baseline ADTs



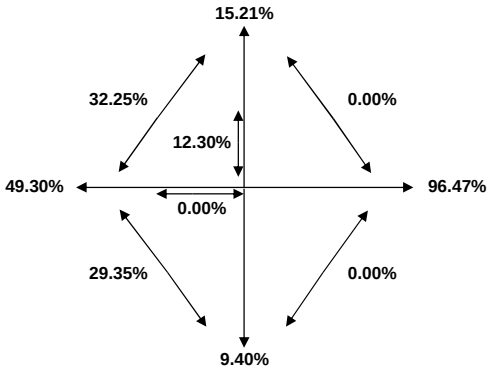
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

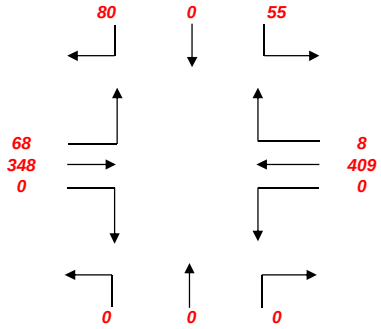


Build Conditions

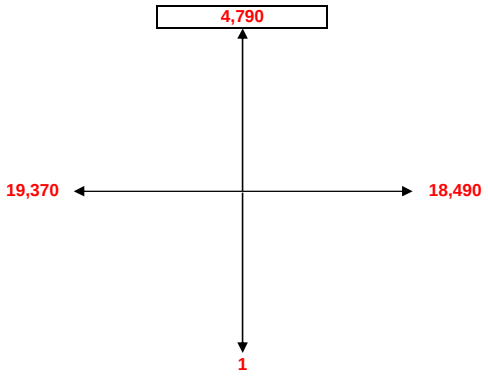
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

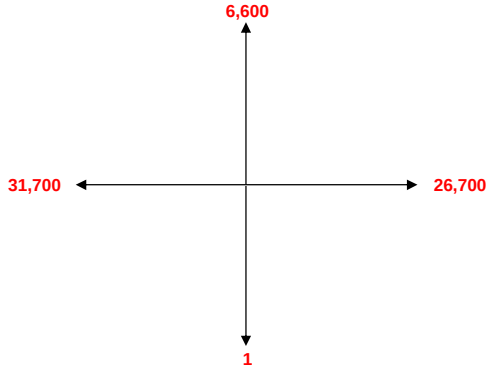
2016 Baseline Peak Hour Turning Movement Volumes (AM)



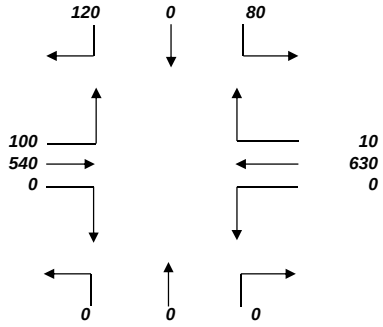
2016 Baseline ADTs



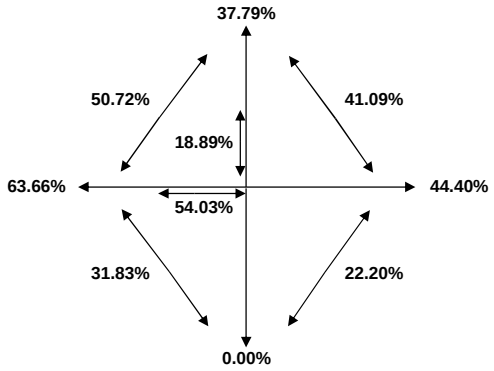
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

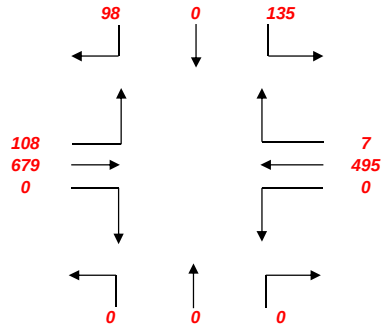


Build Conditions

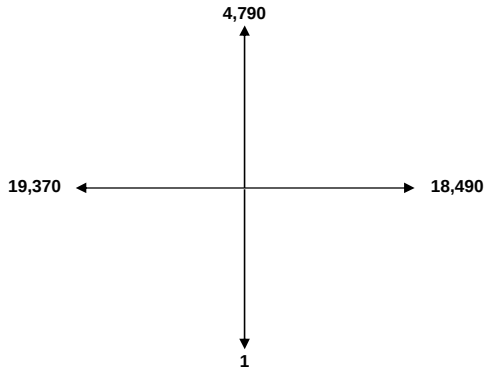
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

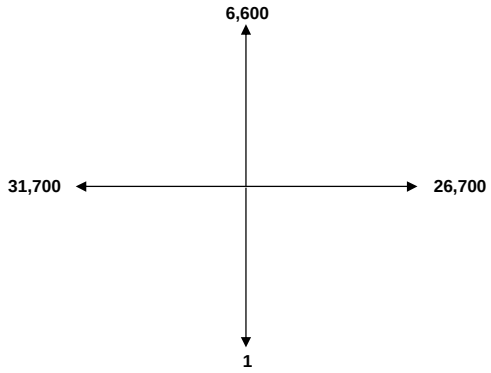
2016 Baseline Peak Hour Turning Movement Volumes (PM)



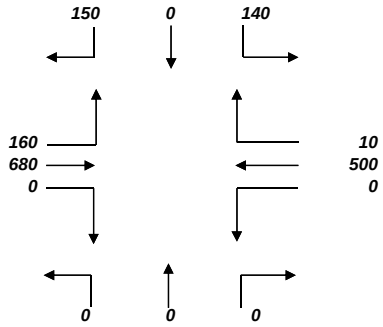
2016 Baseline ADTs



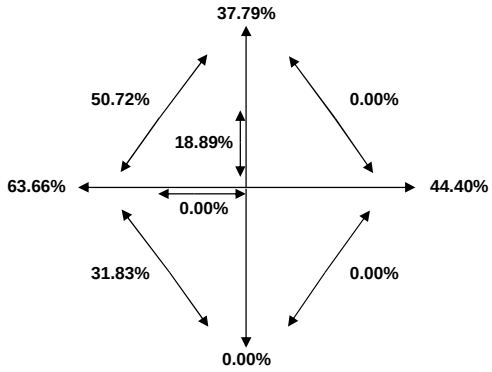
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

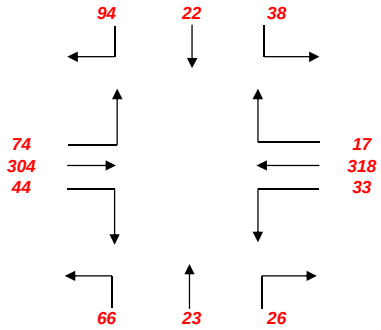


Build Conditions

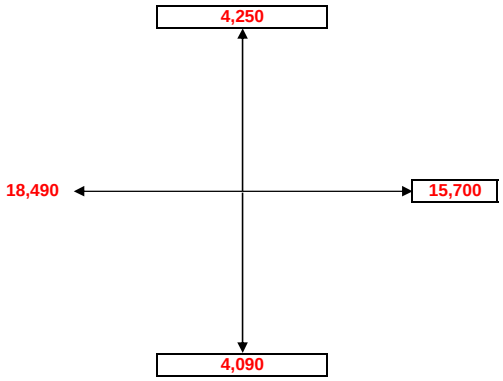
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

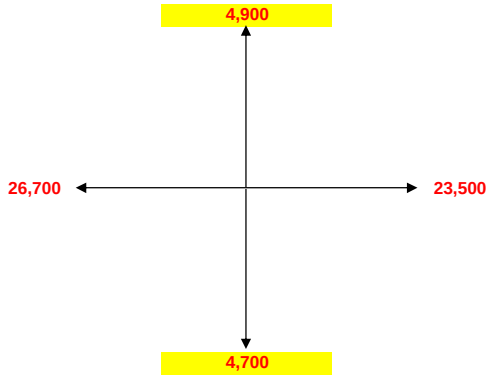
2016 Baseline Peak Hour Turning Movement Volumes (AM)



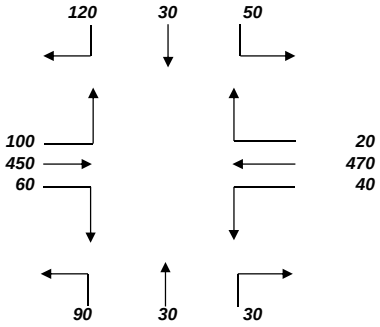
2016 Baseline ADTs



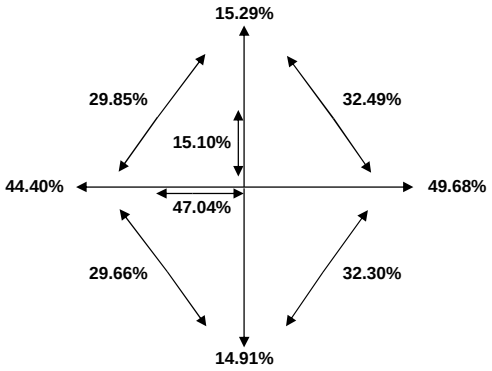
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

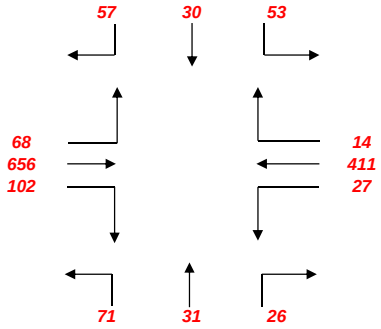


Build Conditions

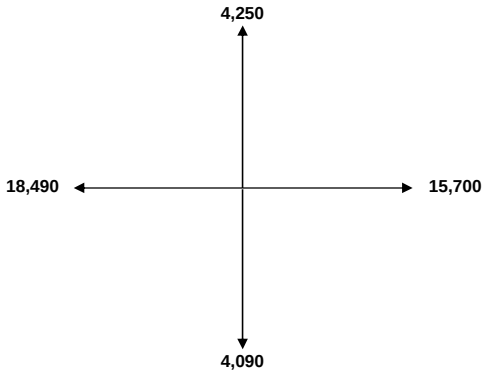
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

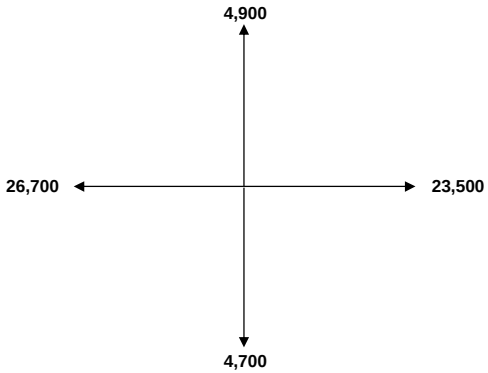
2016 Baseline Peak Hour Turning Movement Volumes (PM)



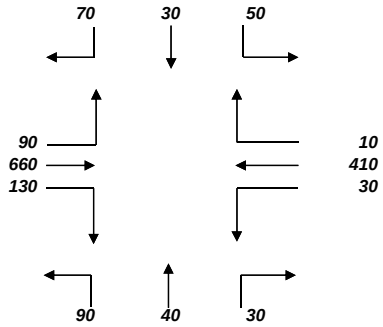
2016 Baseline ADTs



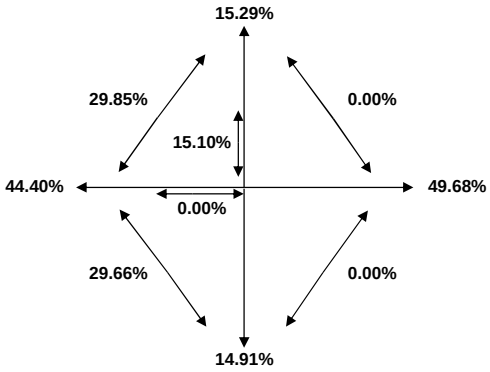
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

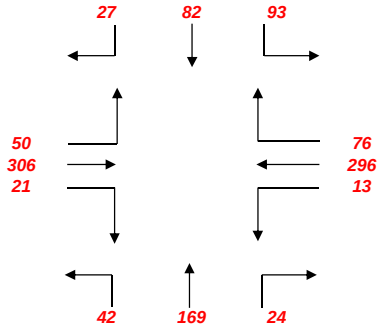


Build Conditions

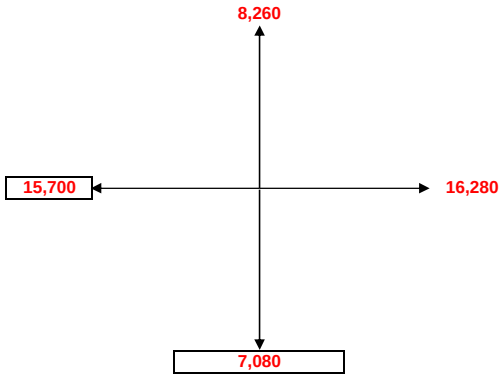
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

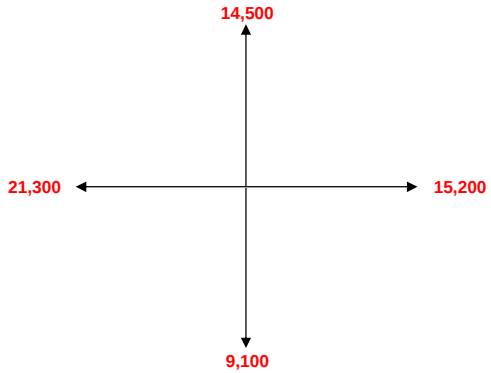
2016 Baseline Peak Hour Turning Movement Volumes (AM)



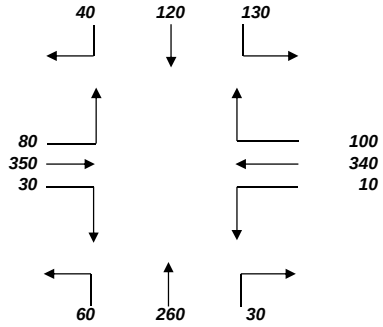
2016 Baseline ADTs



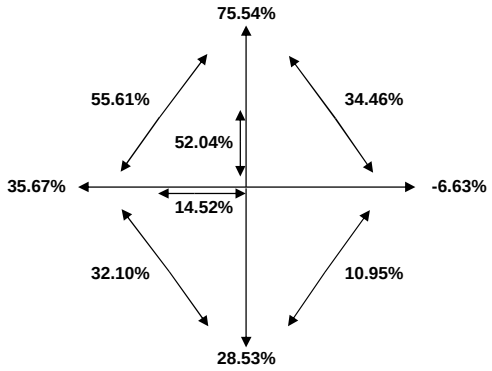
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

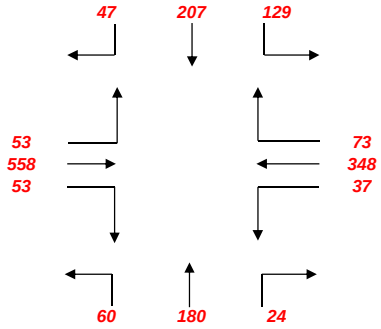


Build Conditions

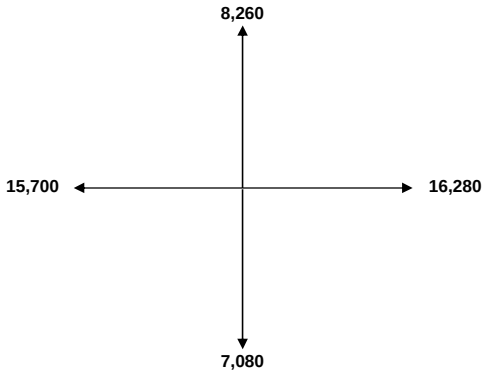
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

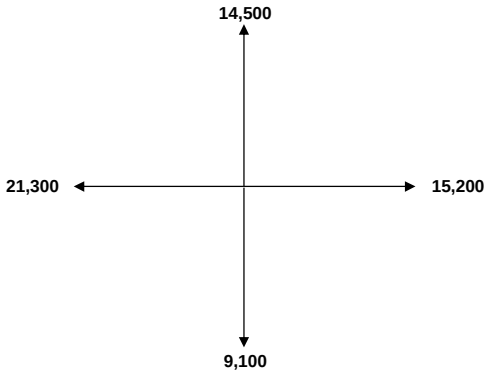
2016 Baseline Peak Hour Turning Movement Volumes (PM)



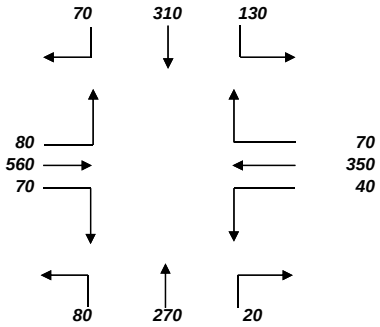
2016 Baseline ADTs



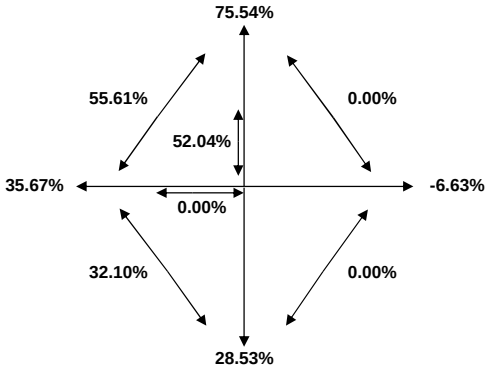
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

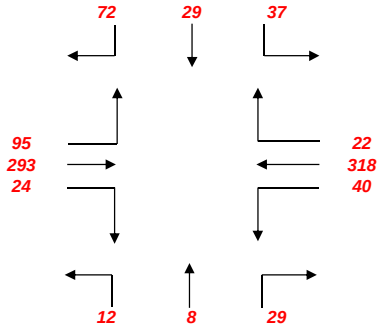


Build Conditions

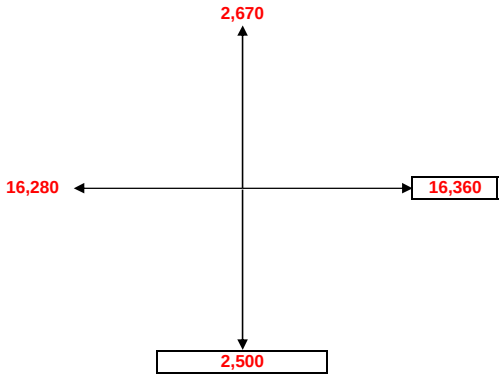
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

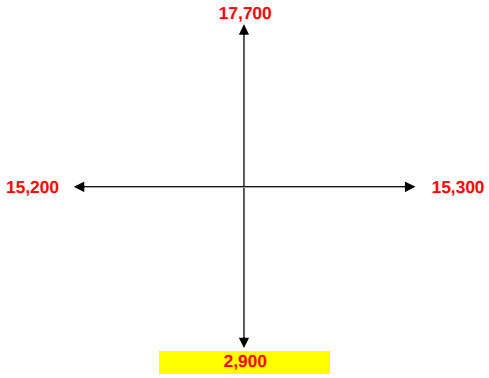
2016 Baseline Peak Hour Turning Movement Volumes (AM)



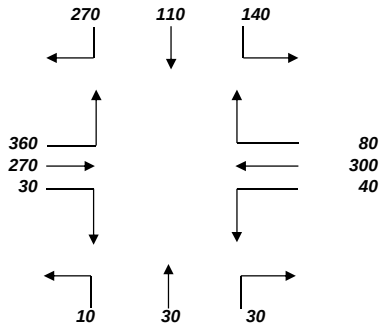
2016 Baseline ADTs



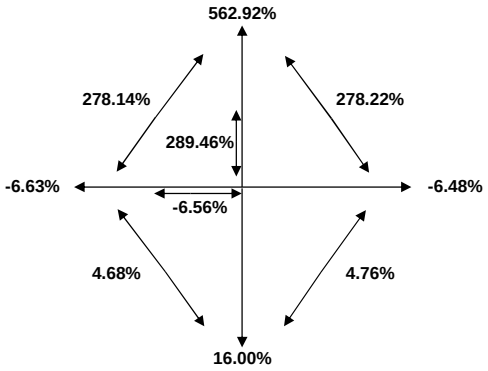
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

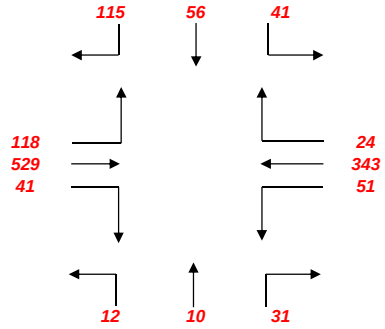


Build Conditions

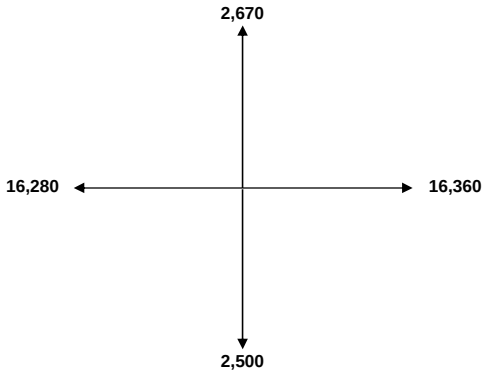
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

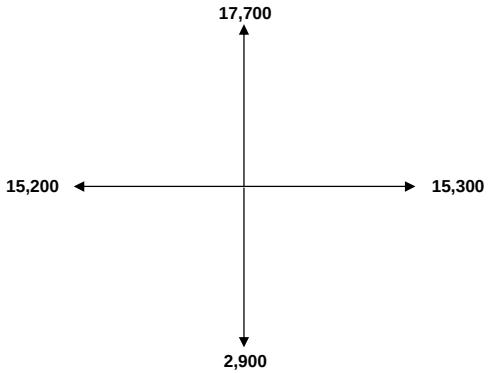
2016 Baseline Peak Hour Turning Movement Volumes (PM)



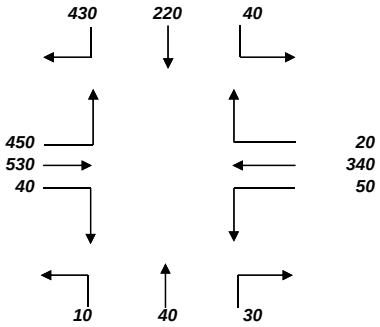
2016 Baseline ADTs



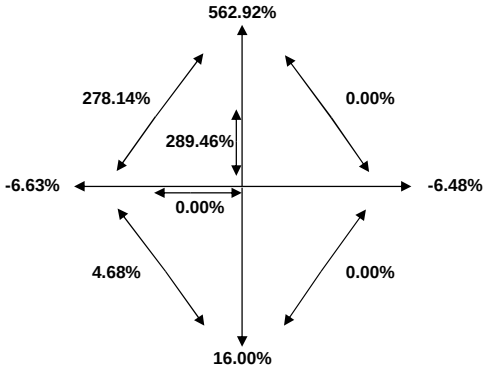
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

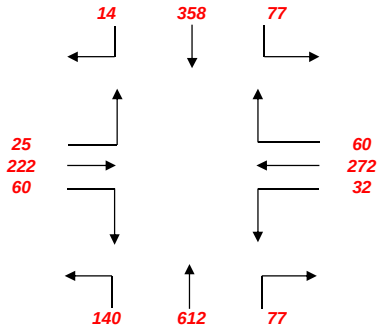


Build Conditions

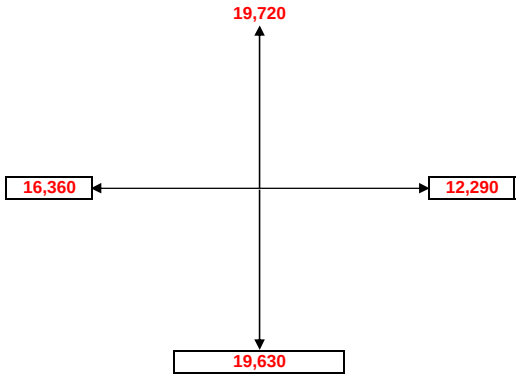
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

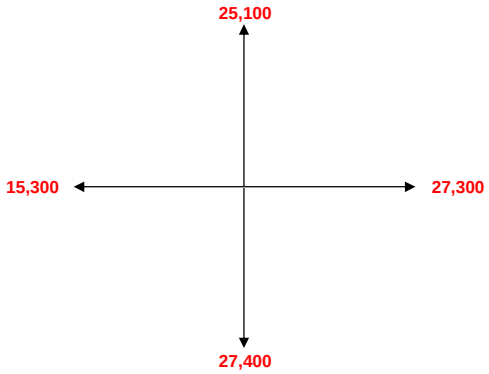
2016 Baseline Peak Hour Turning Movement Volumes (AM)



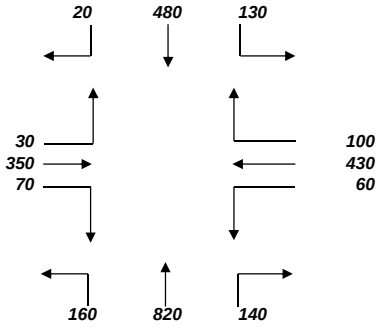
2016 Baseline ADTs



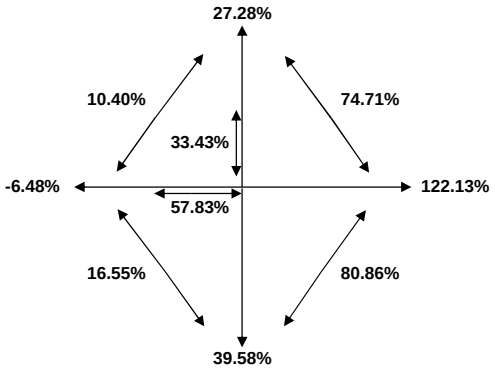
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

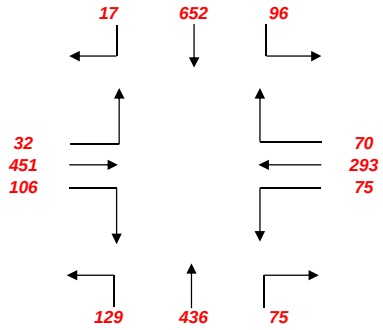


Build Conditions

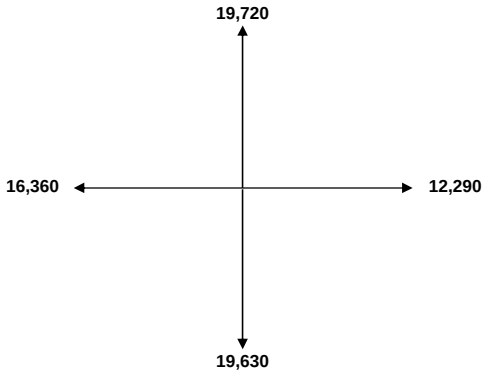
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

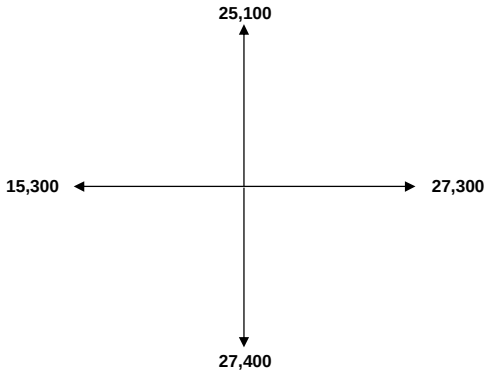
2016 Baseline Peak Hour Turning Movement Volumes (PM)



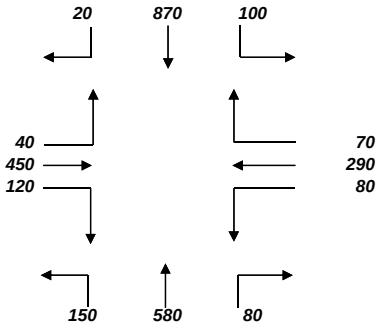
2016 Baseline ADTs



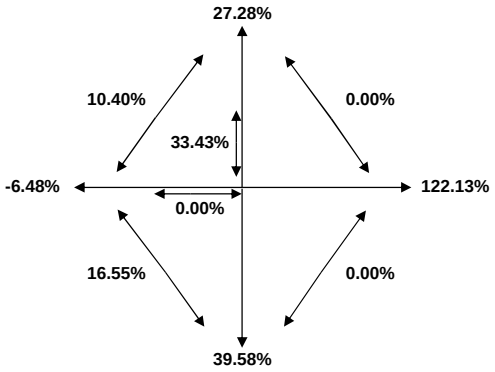
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

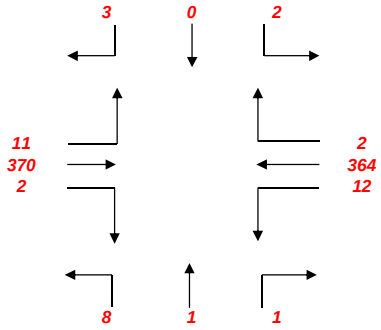


Build Conditions

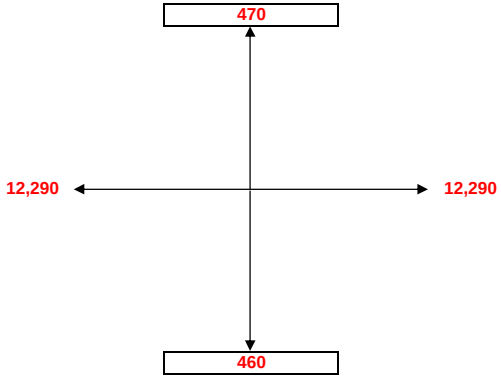
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

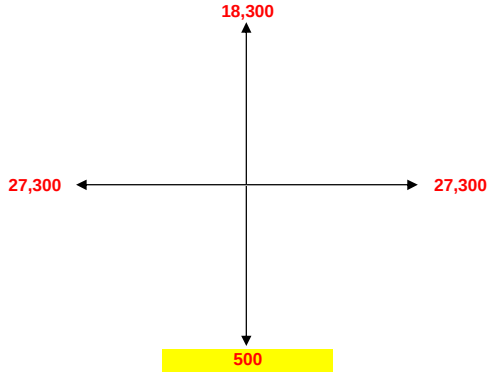
2016 Baseline Peak Hour Turning Movement Volumes (AM)



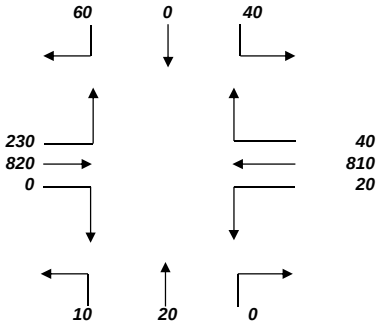
2016 Baseline ADTs



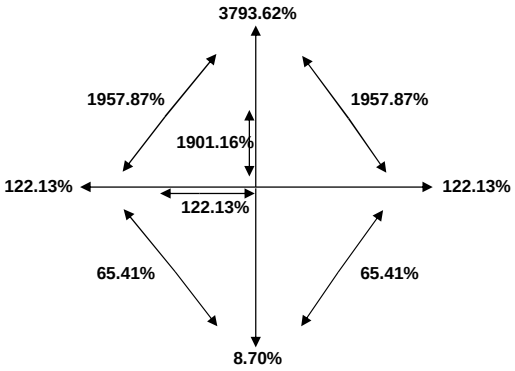
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

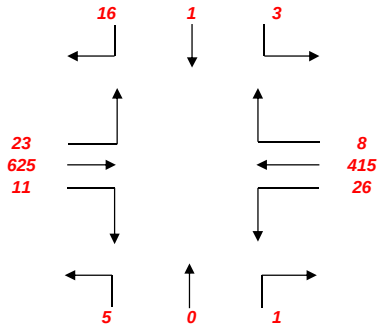


Build Conditions

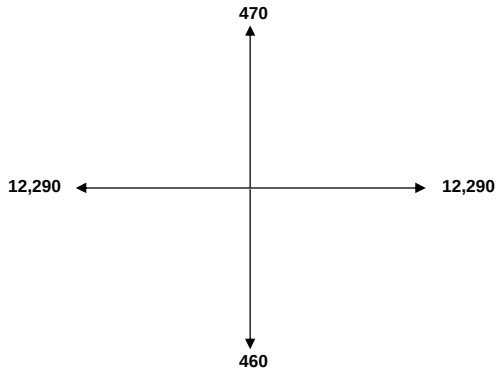
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

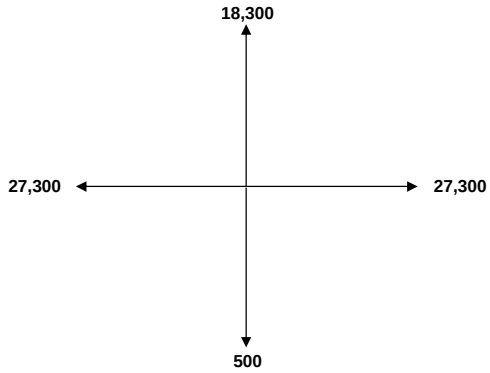
2016 Baseline Peak Hour Turning Movement Volumes (PM)



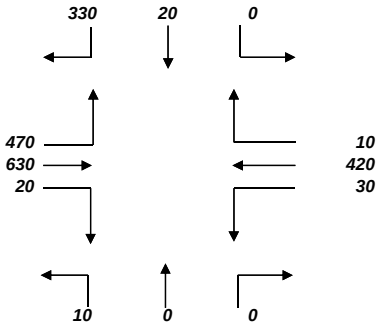
2016 Baseline ADTs



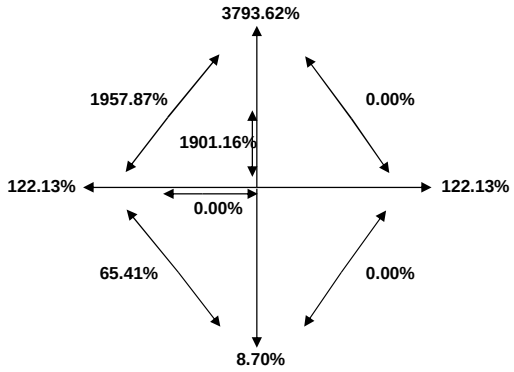
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

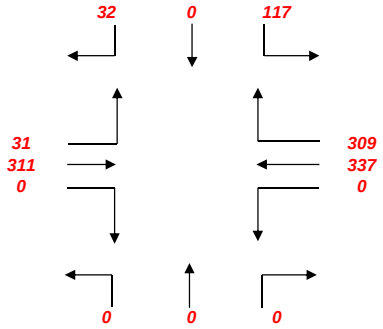


Build Conditions

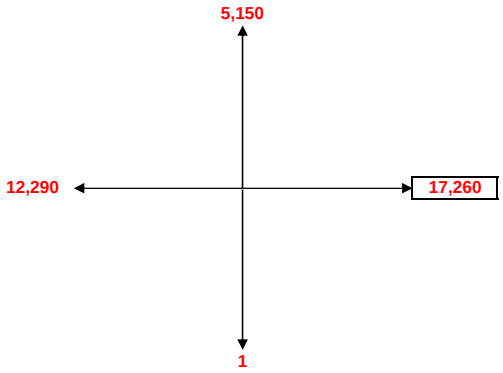
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

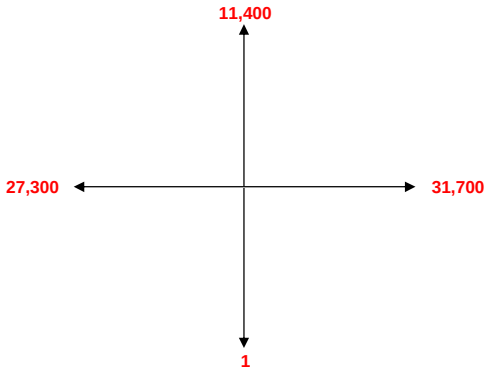
2016 Baseline Peak Hour Turning Movement Volumes (AM)



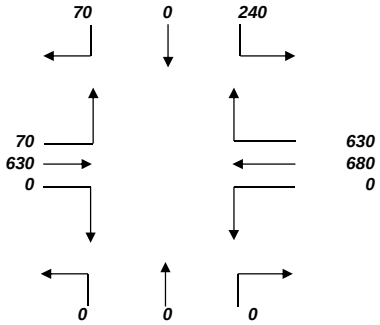
2016 Baseline ADTs



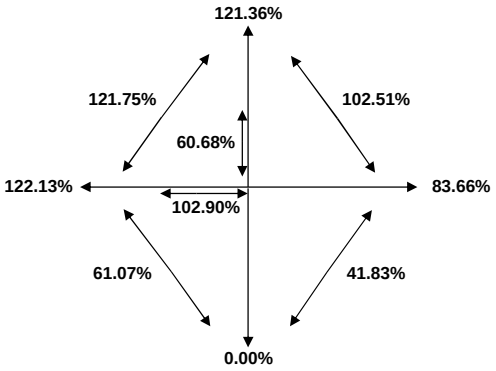
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

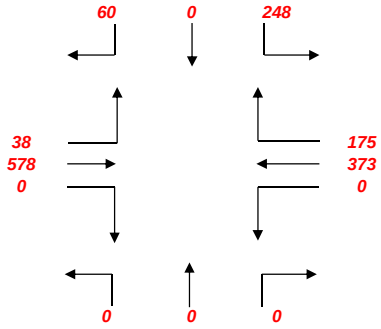


Build Conditions

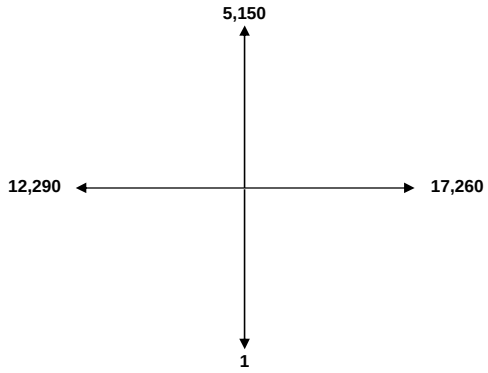
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

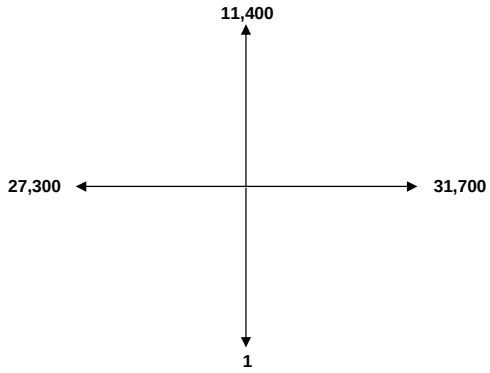
2016 Baseline Peak Hour Turning Movement Volumes (PM)



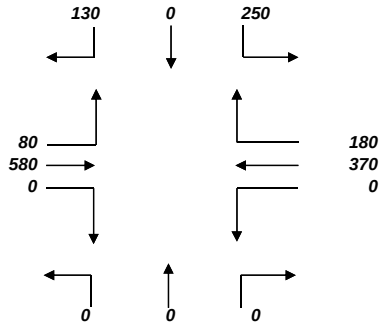
2016 Baseline ADTs



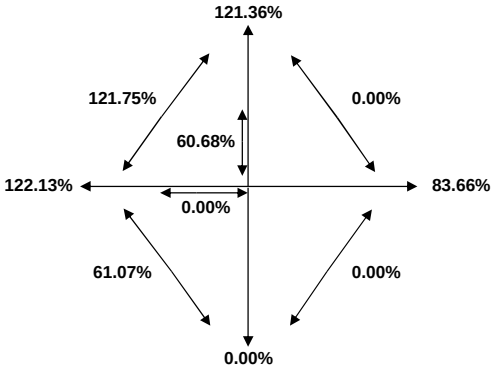
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

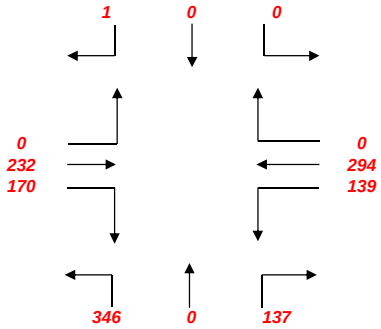


Build Conditions

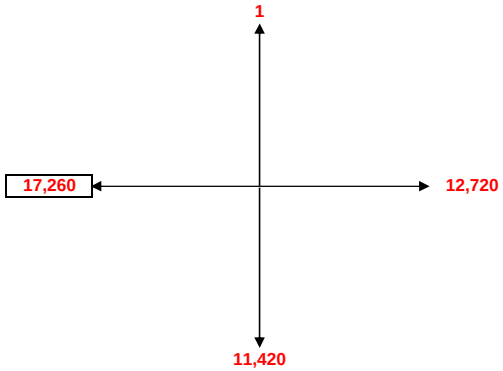
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

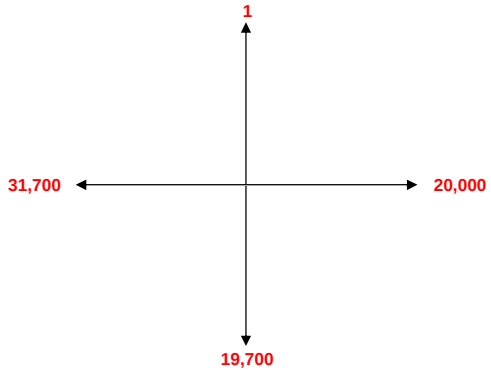
2016 Baseline Peak Hour Turning Movement Volumes (AM)



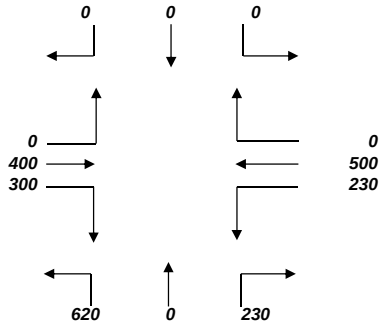
2016 Baseline ADTs



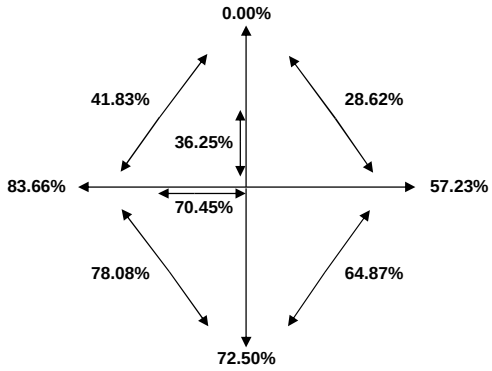
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

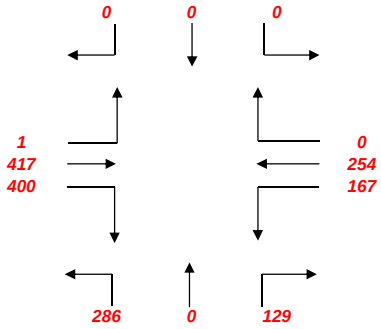


Build Conditions

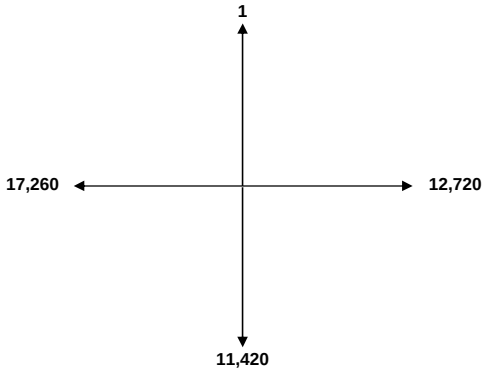
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

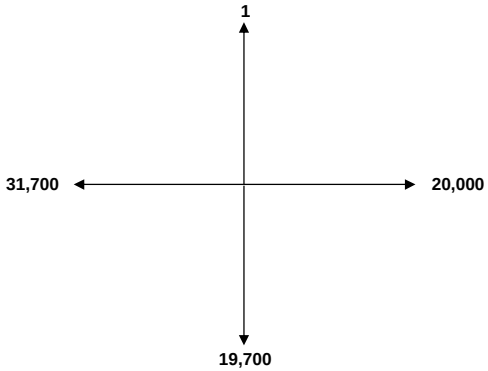
2016 Baseline Peak Hour Turning Movement Volumes (PM)



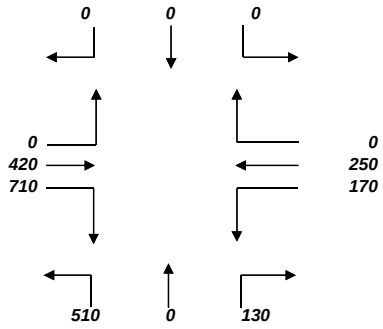
2016 Baseline ADTs



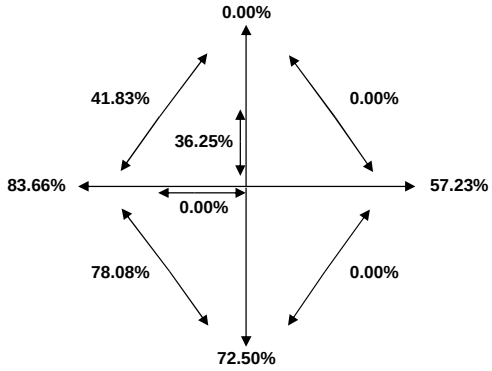
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

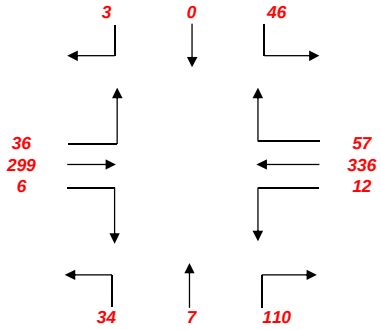


Build Conditions

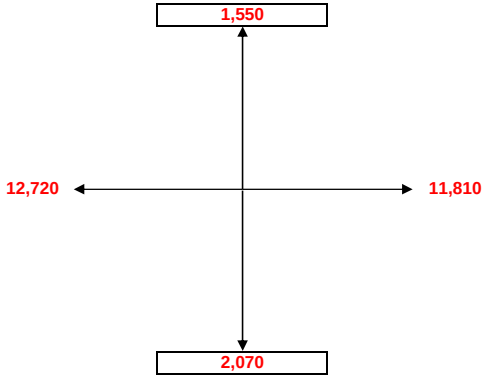
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

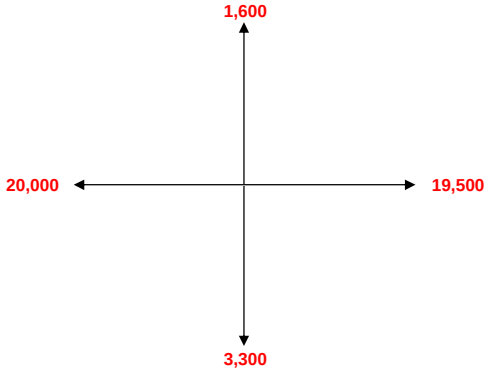
2016 Baseline Peak Hour Turning Movement Volumes (AM)



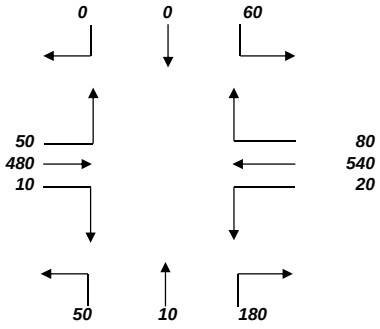
2016 Baseline ADTs



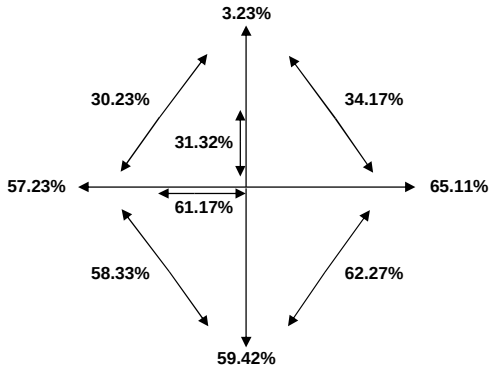
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

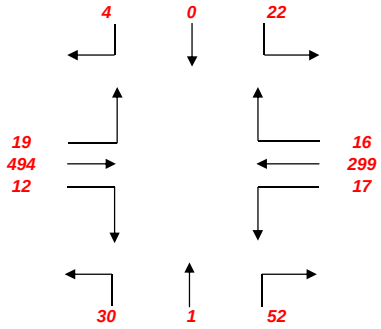


Build Conditions

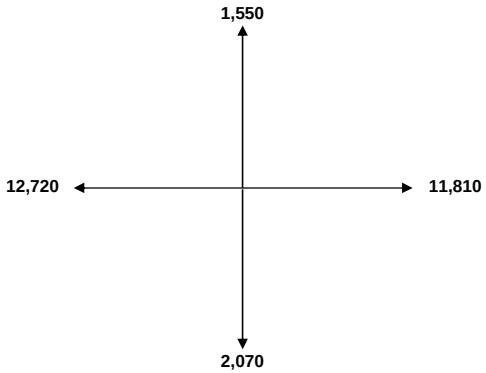
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

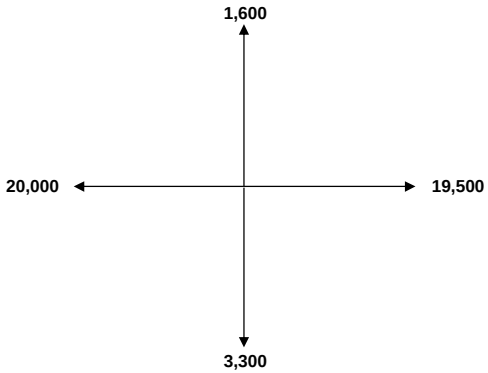
2016 Baseline Peak Hour Turning Movement Volumes (PM)



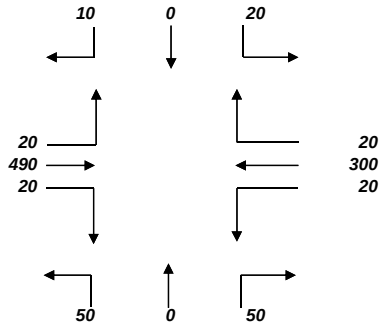
2016 Baseline ADTs



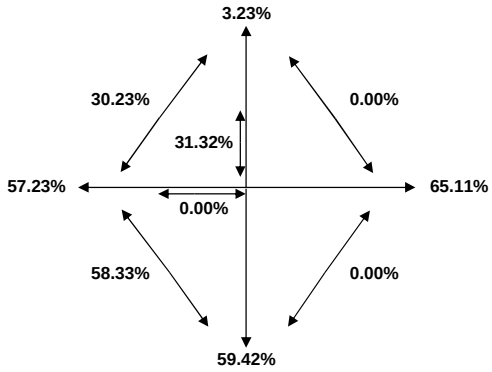
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

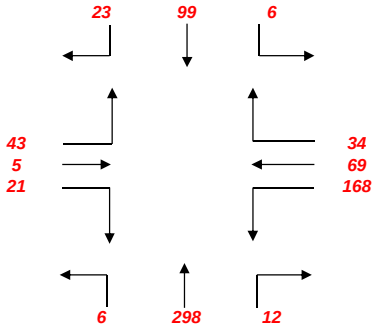


Build Conditions

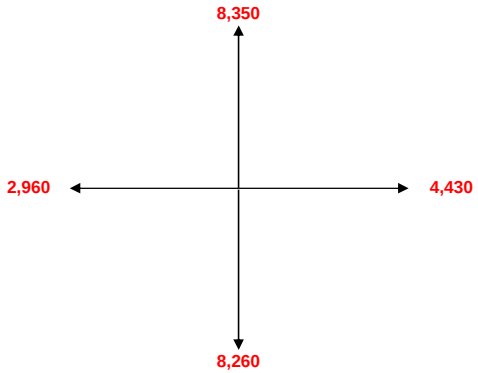
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

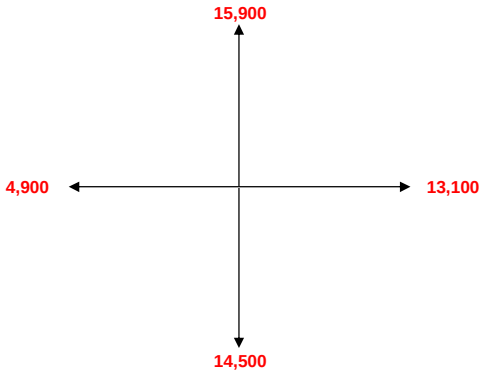
2016 Baseline Peak Hour Turning Movement Volumes (AM)



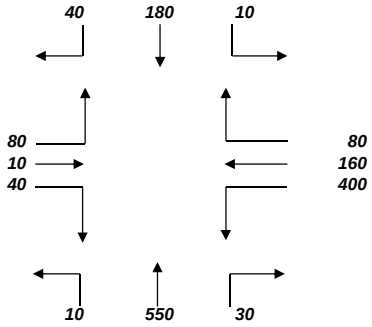
2016 Baseline ADTs



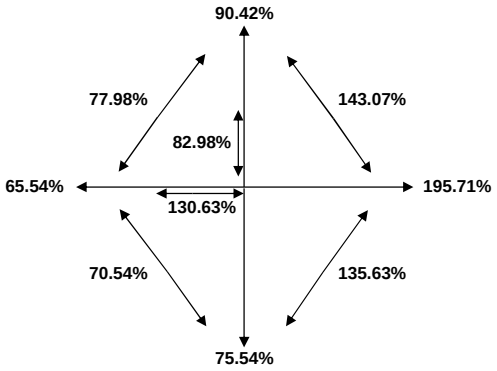
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

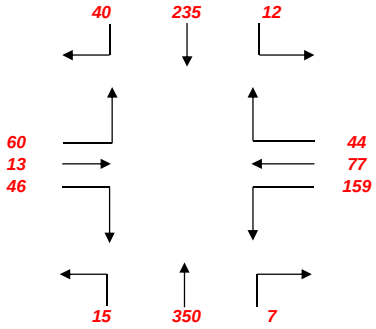


Build Conditions

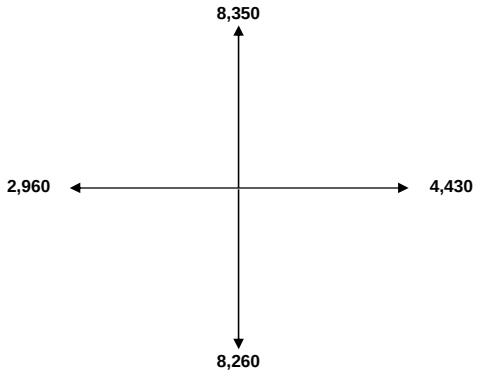
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

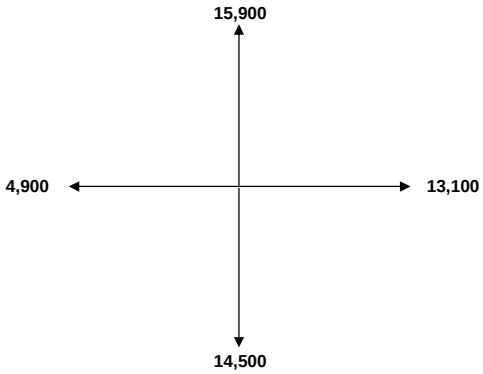
2016 Baseline Peak Hour Turning Movement Volumes (PM)



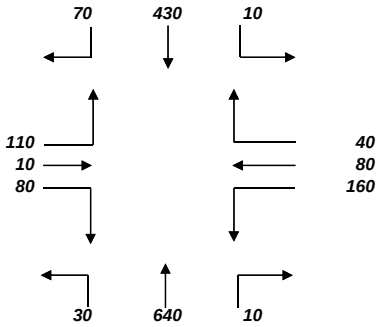
2016 Baseline ADTs



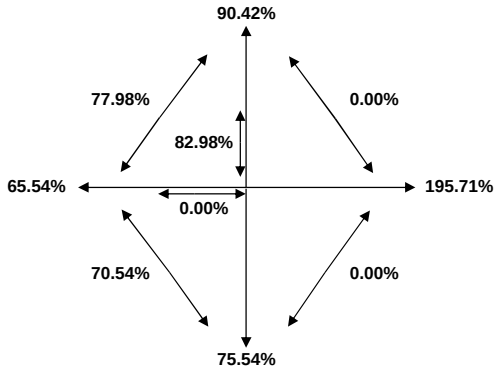
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

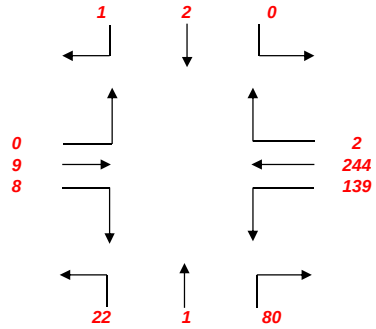


Build Conditions

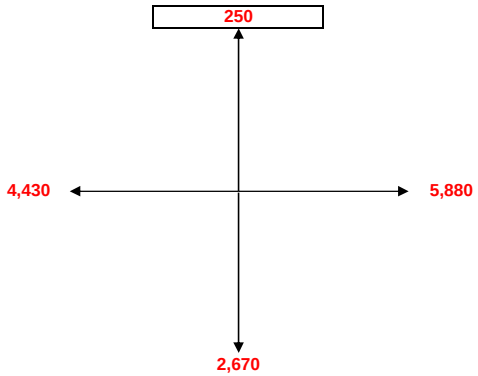
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

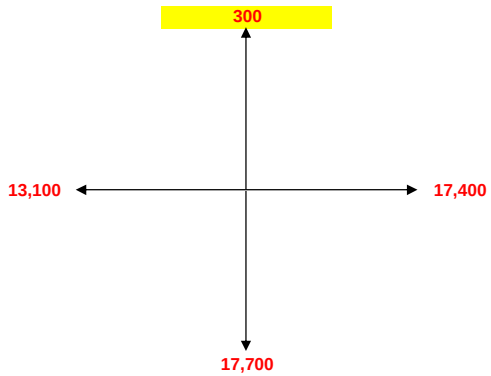
2016 Baseline Peak Hour Turning Movement Volumes (AM)



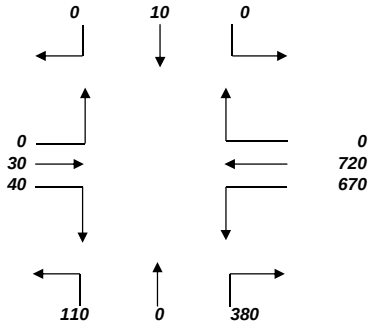
2016 Baseline ADTs



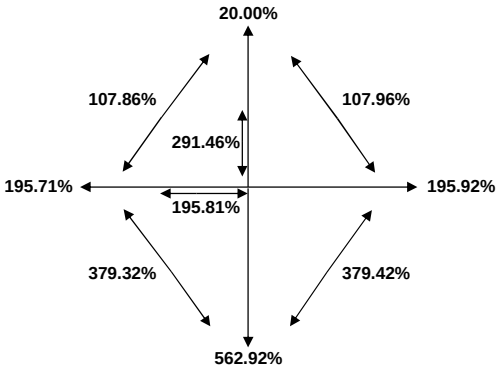
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

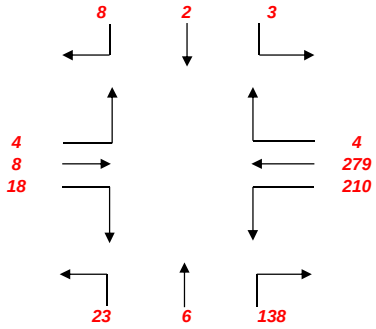


Build Conditions

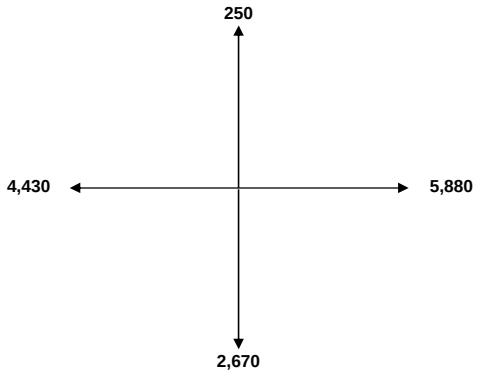
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

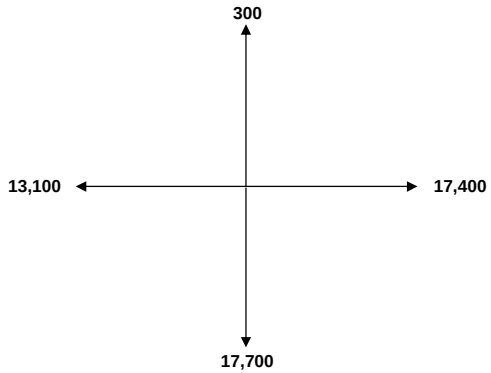
2016 Baseline Peak Hour Turning Movement Volumes (PM)



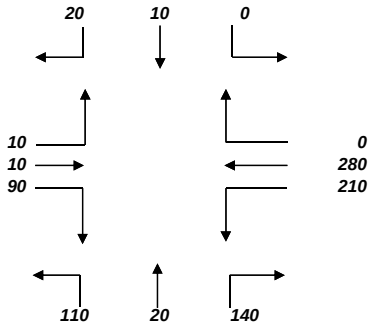
2016 Baseline ADTs



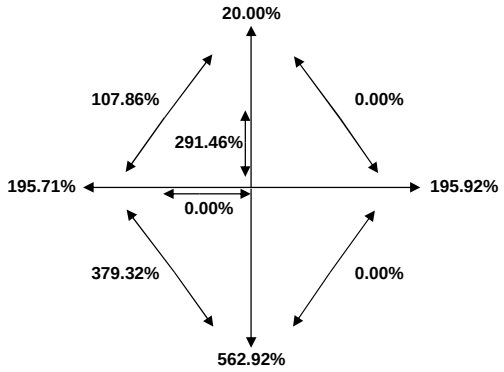
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

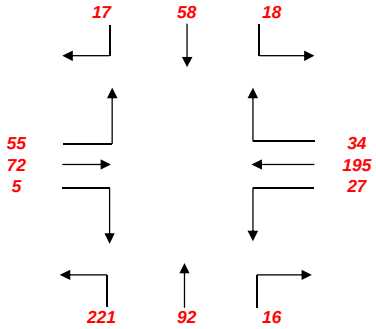


Build Conditions

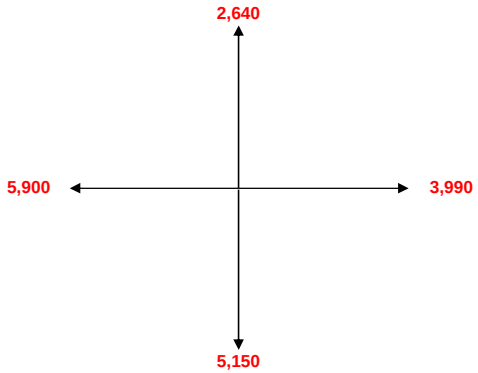
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

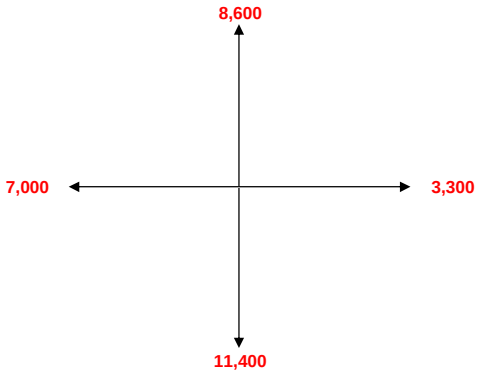
2016 Baseline Peak Hour Turning Movement Volumes (AM)



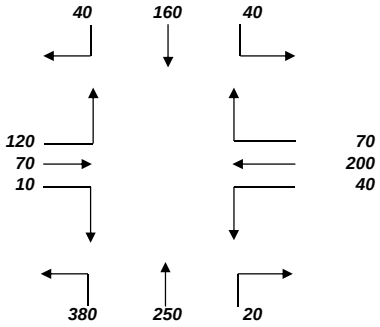
2016 Baseline ADTs



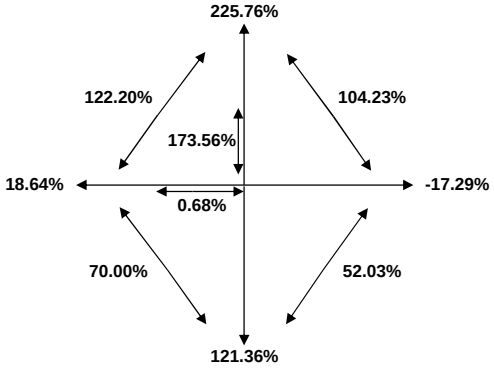
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

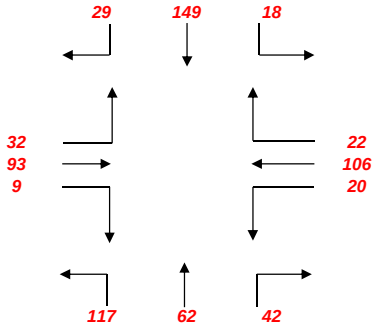


Build Conditions

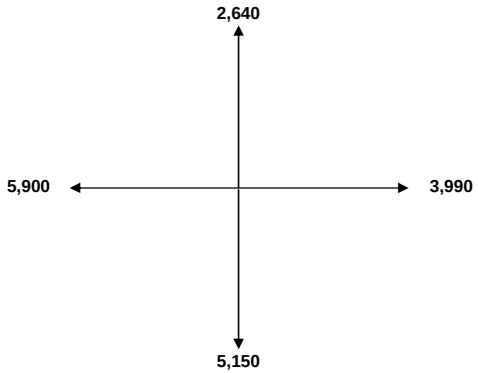
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

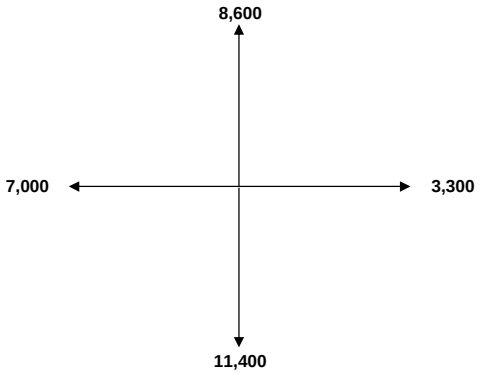
2016 Baseline Peak Hour Turning Movement Volumes (PM)



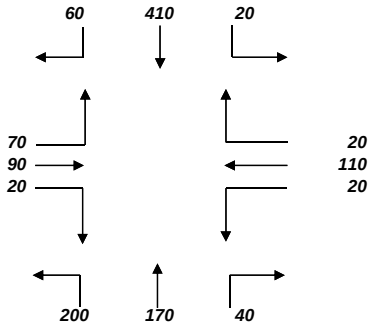
2016 Baseline ADTs



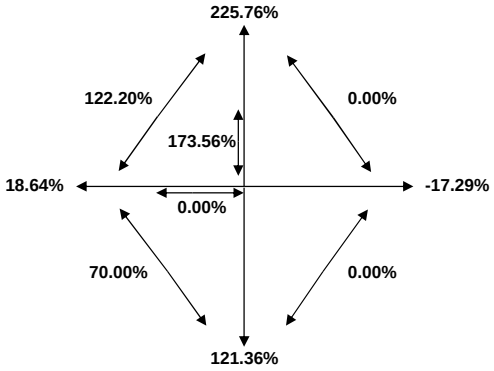
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

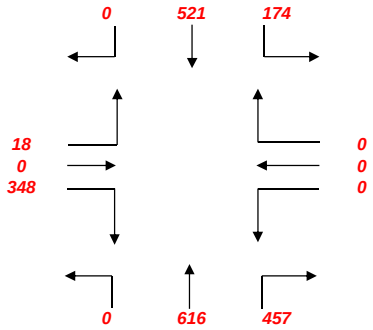


Build Conditions

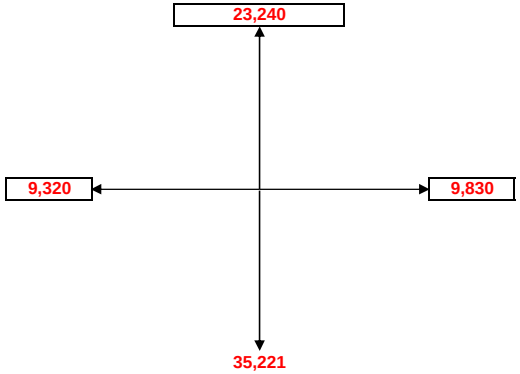
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

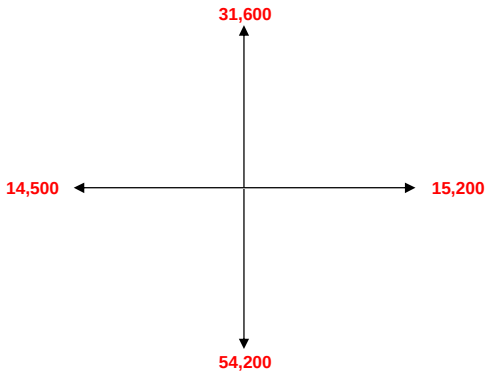
2016 Baseline Peak Hour Turning Movement Volumes (AM)



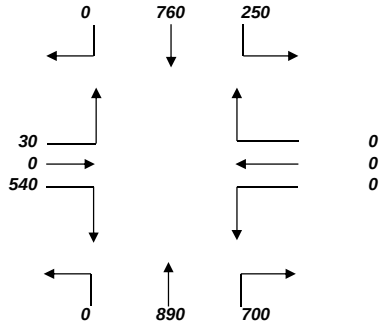
2016 Baseline ADTs



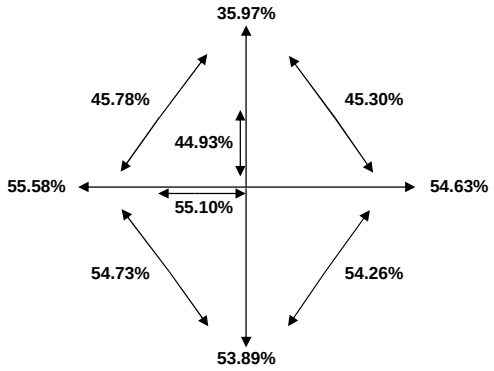
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

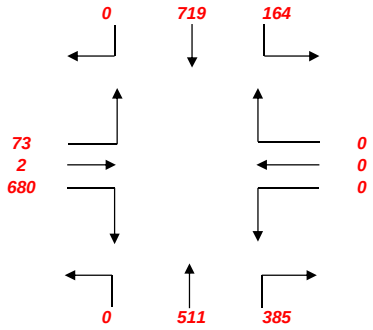


Build Conditions

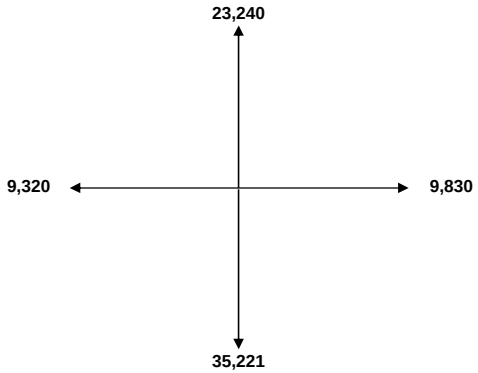
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

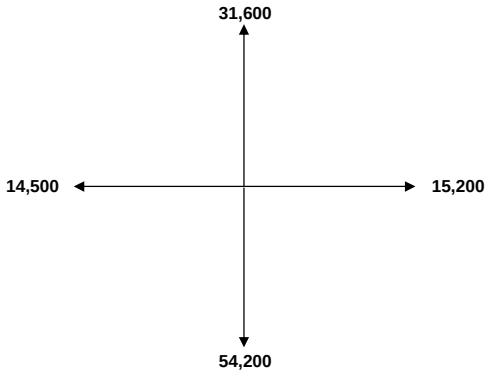
2016 Baseline Peak Hour Turning Movement Volumes (PM)



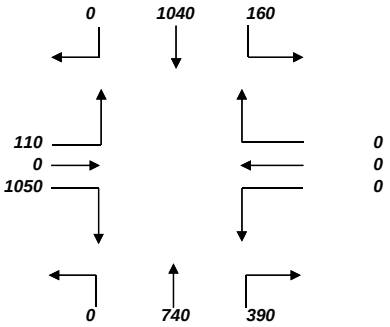
2016 Baseline ADTs



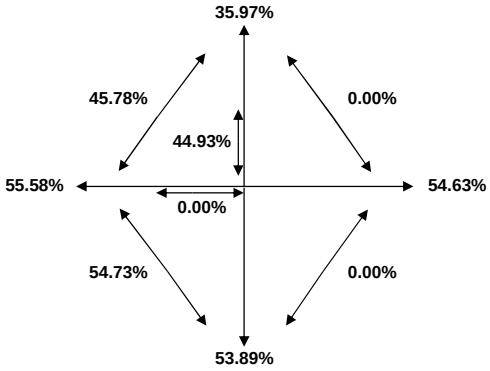
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

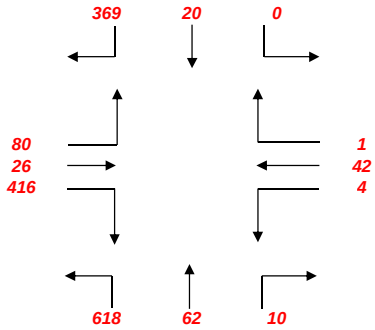


Build Conditions

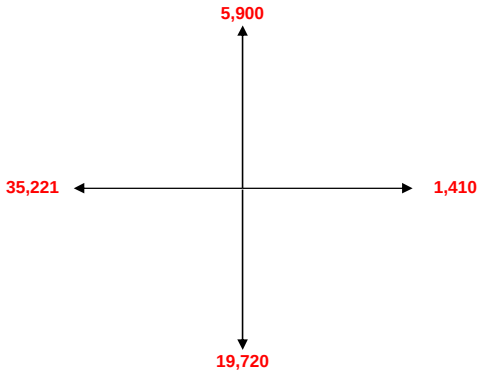
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove Way

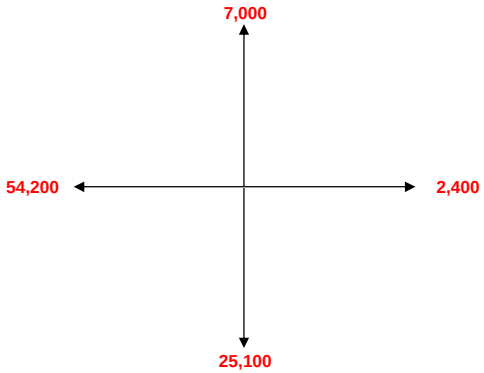
2016 Baseline Peak Hour Turning Movement Volumes (AM)



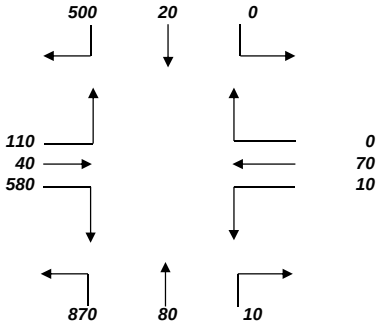
2016 Baseline ADTs



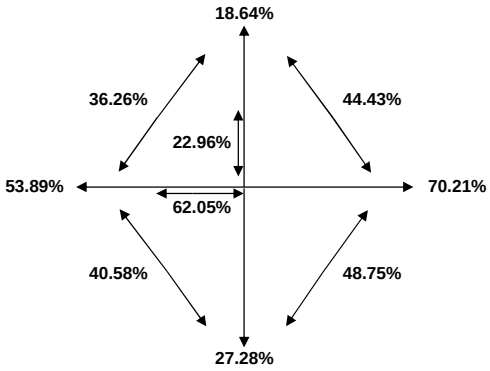
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

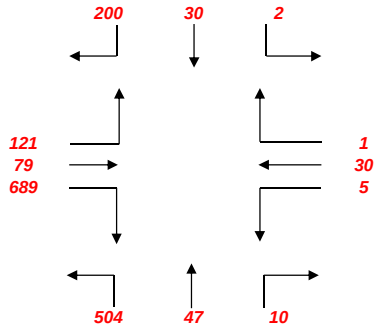


Build Conditions

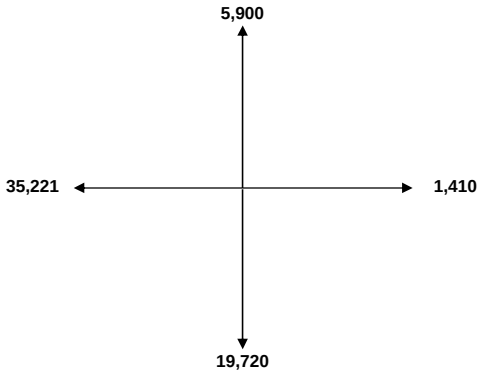
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove W

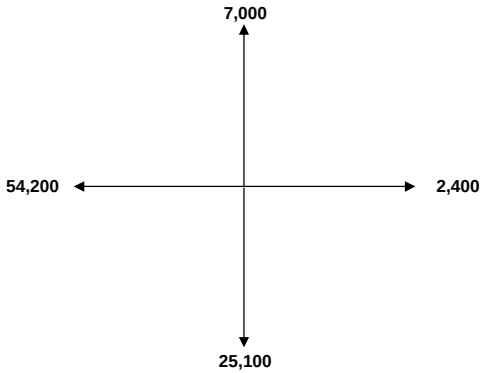
2016 Baseline Peak Hour Turning Movement Volumes (PM)



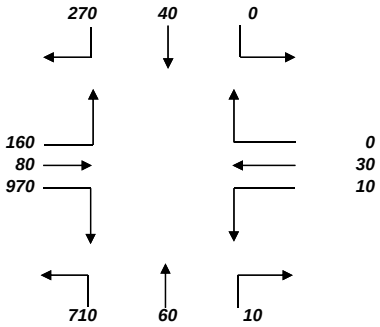
2016 Baseline ADTs



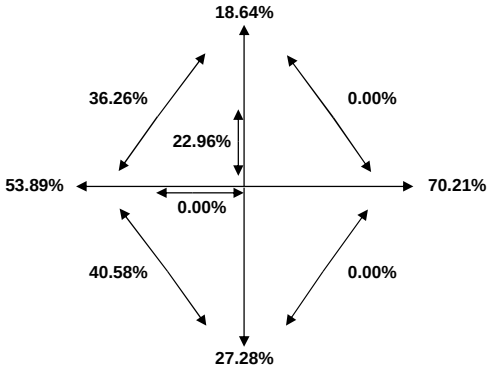
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

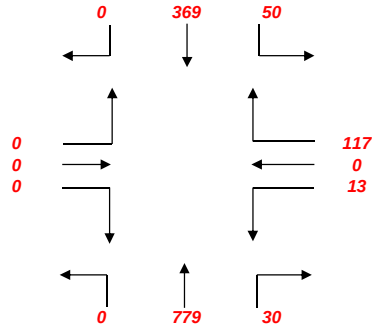


Build Conditions

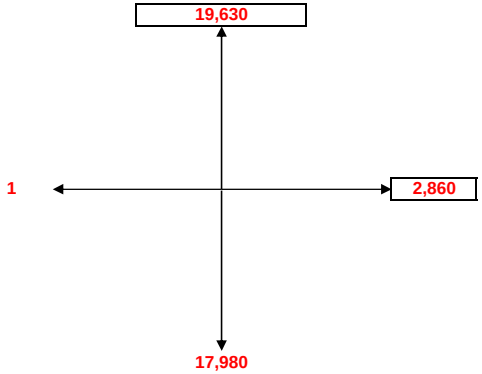
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

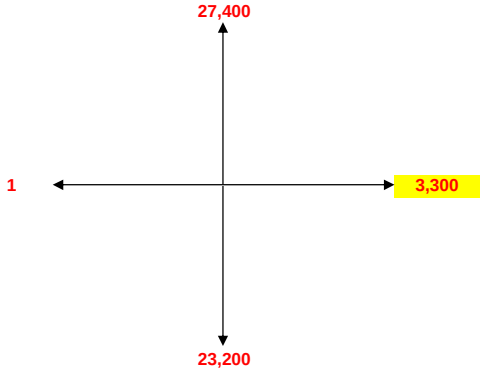
2016 Baseline Peak Hour Turning Movement Volumes (AM)



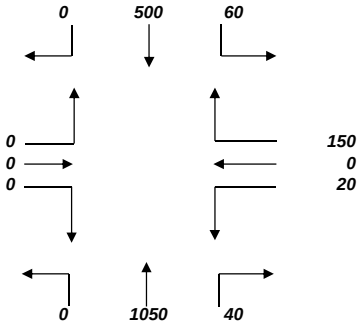
2016 Baseline ADTs



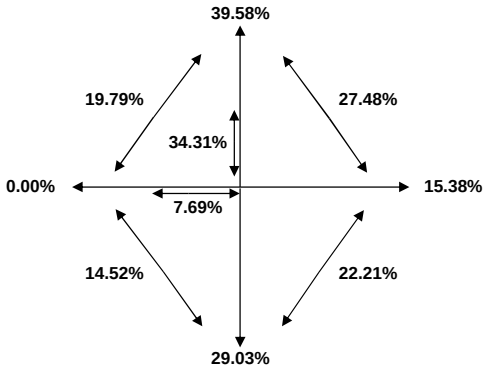
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

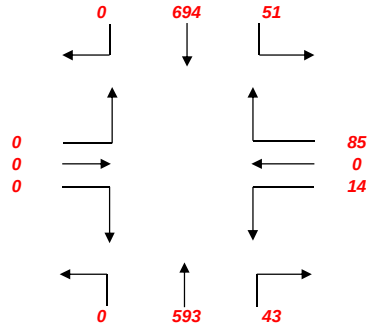


Build Conditions

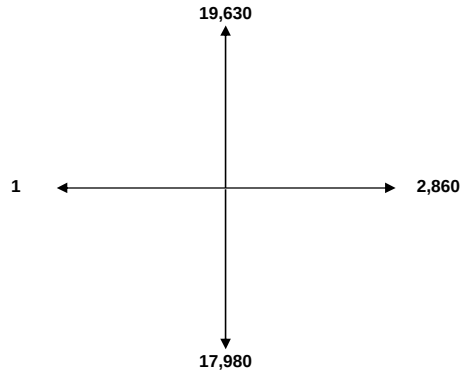
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

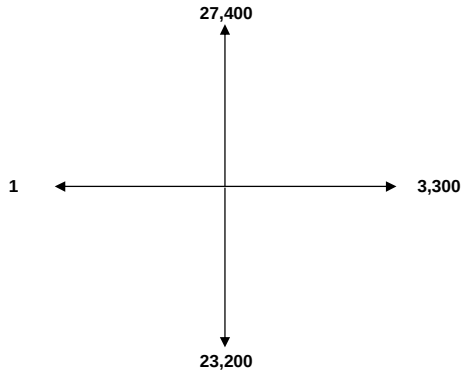
2016 Baseline Peak Hour Turning Movement Volumes (PM)



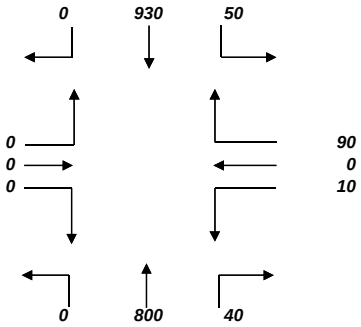
2016 Baseline ADTs



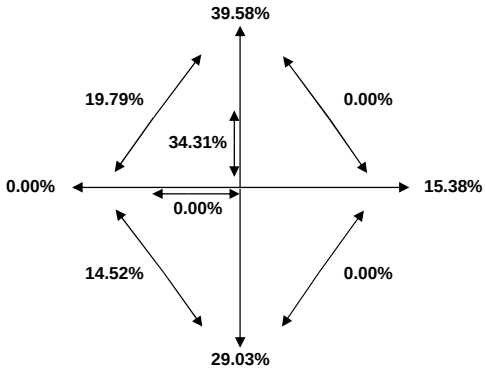
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

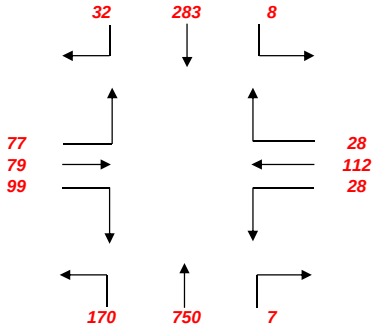


Build Conditions

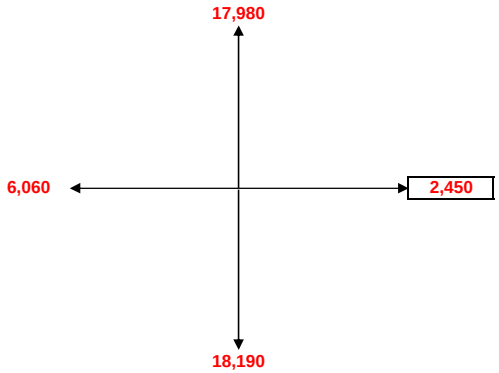
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

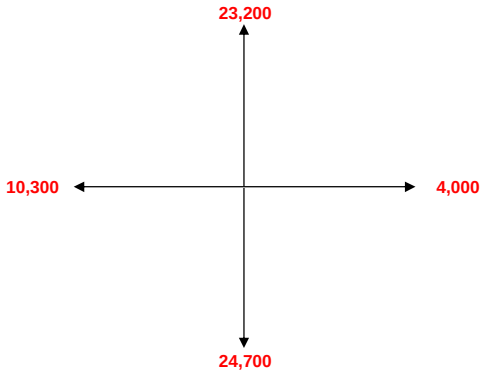
2016 Baseline Peak Hour Turning Movement Volumes (AM)



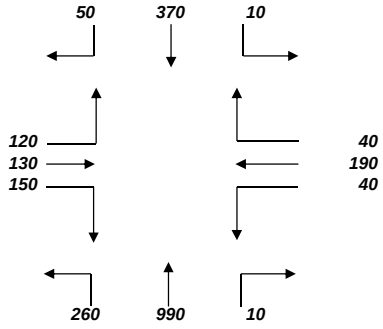
2016 Baseline ADTs



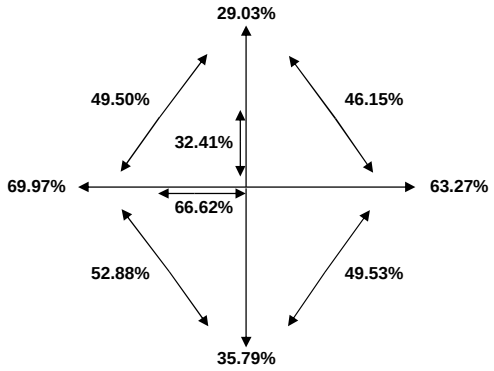
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

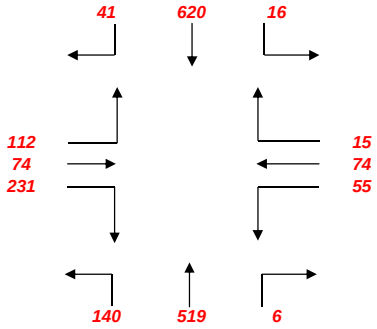


Build Conditions

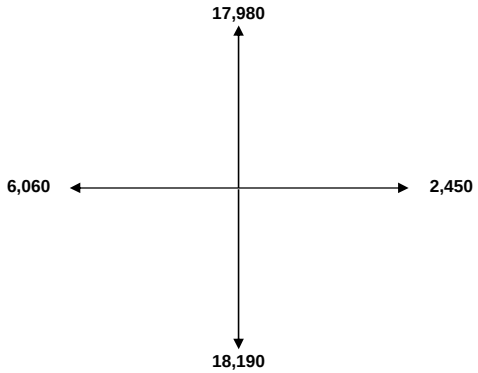
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

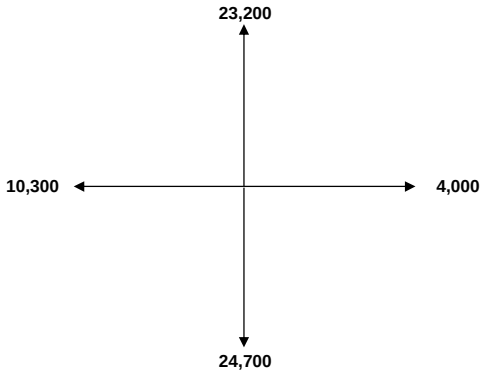
2016 Baseline Peak Hour Turning Movement Volumes (PM)



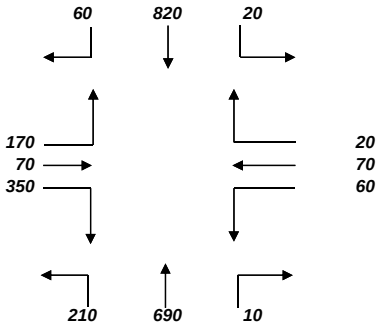
2016 Baseline ADTs



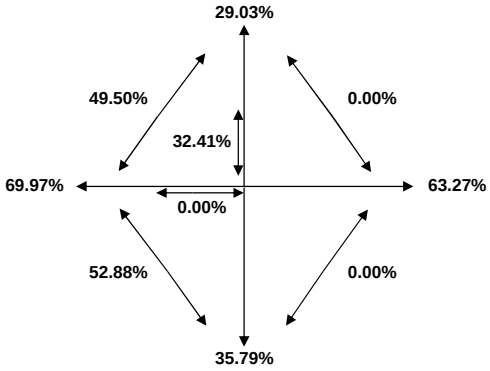
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

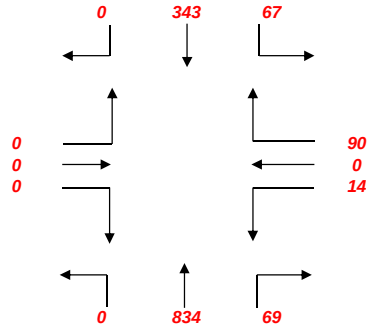


Build Conditions

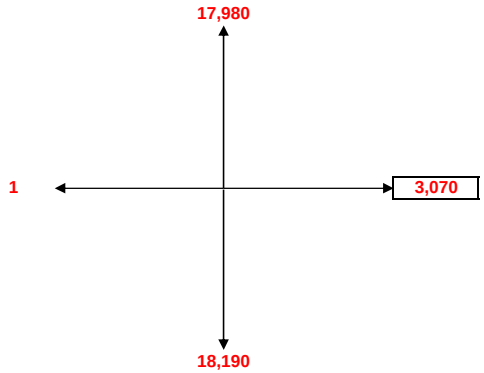
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

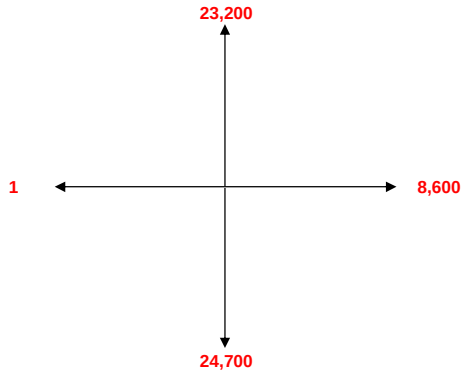
2016 Baseline Peak Hour Turning Movement Volumes (AM)



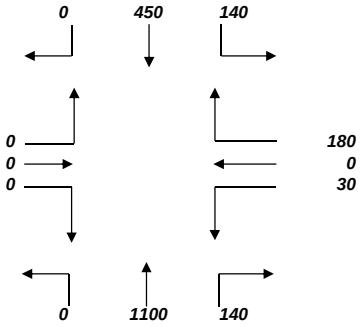
2016 Baseline ADTs



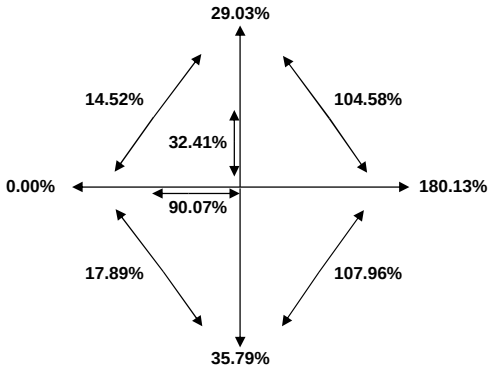
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

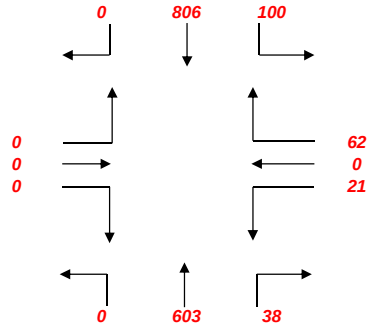


Build Conditions

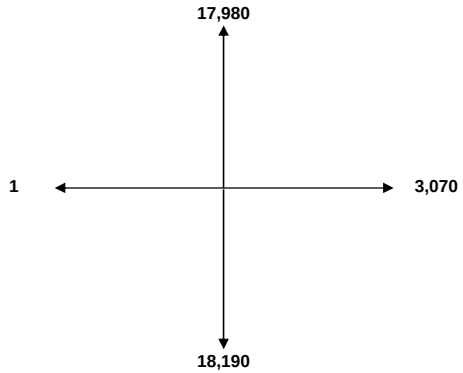
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

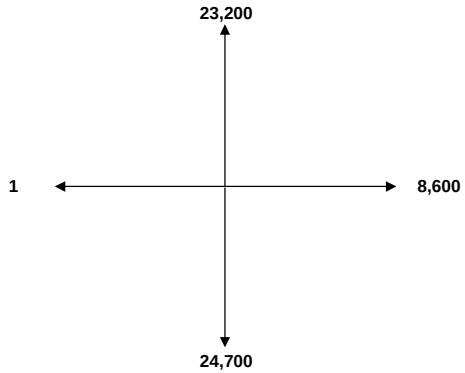
2016 Baseline Peak Hour Turning Movement Volumes (PM)



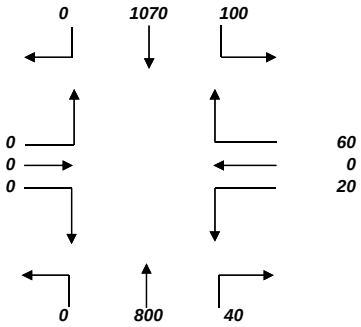
2016 Baseline ADTs



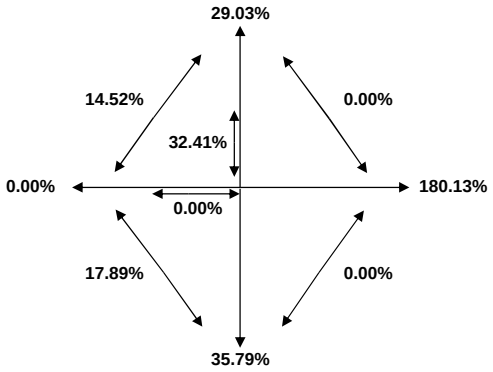
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

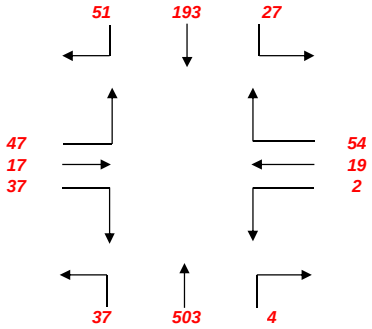


Build Conditions

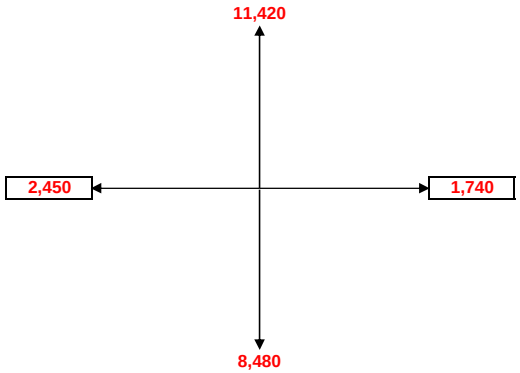
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

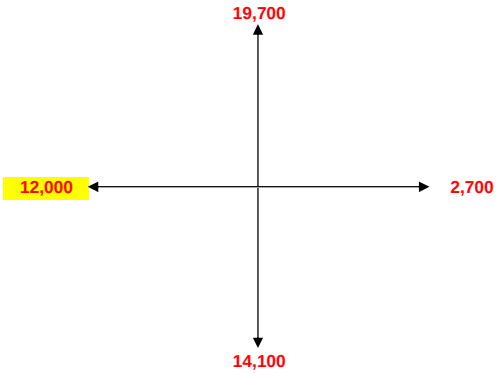
2016 Baseline Peak Hour Turning Movement Volumes (AM)



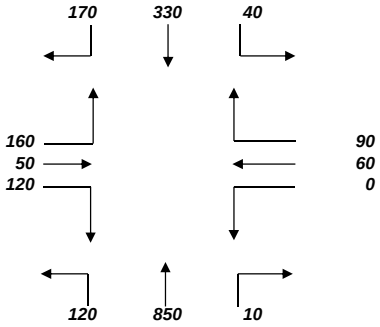
2016 Baseline ADTs



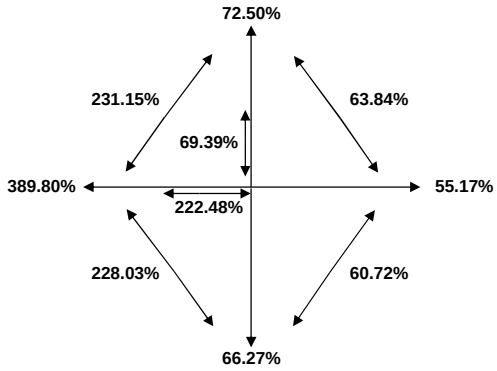
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

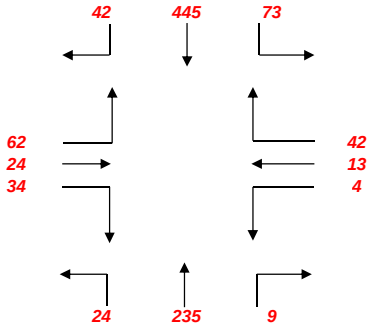


Build Conditions

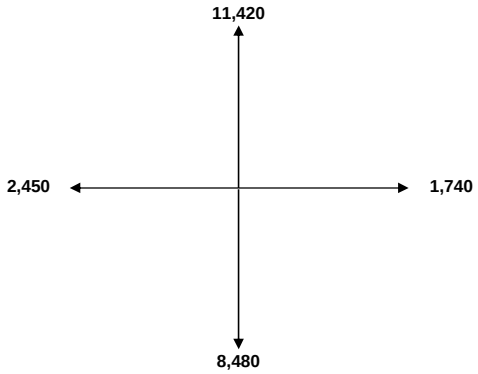
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

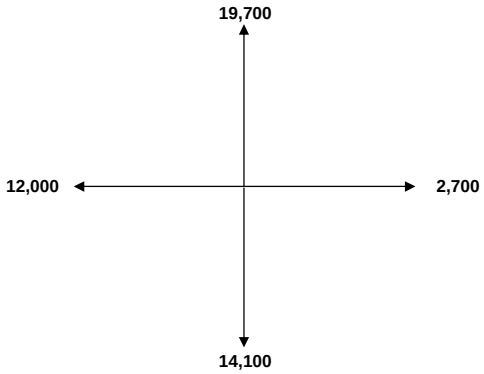
2016 Baseline Peak Hour Turning Movement Volumes (PM)



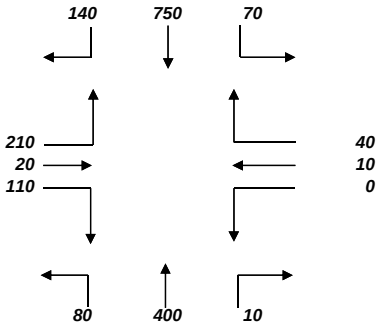
2016 Baseline ADTs



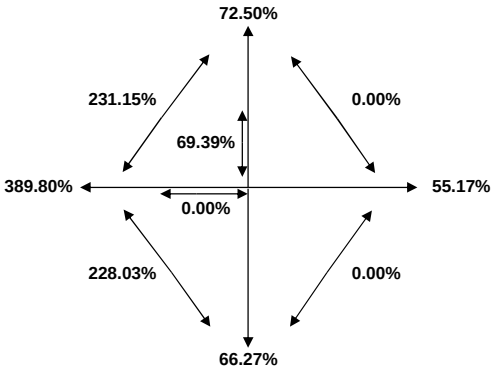
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

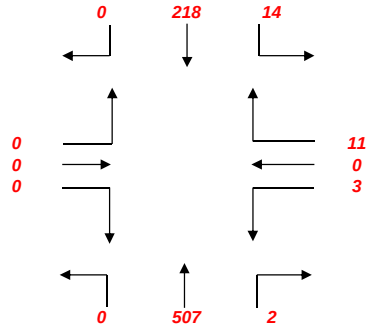


Build Conditions

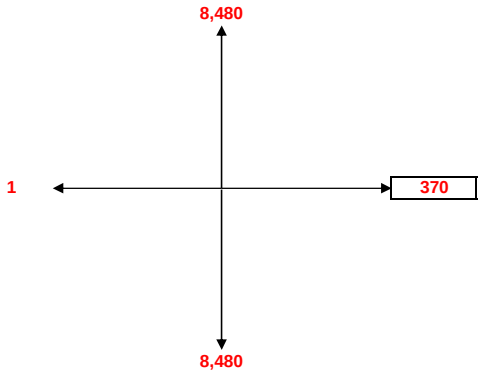
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

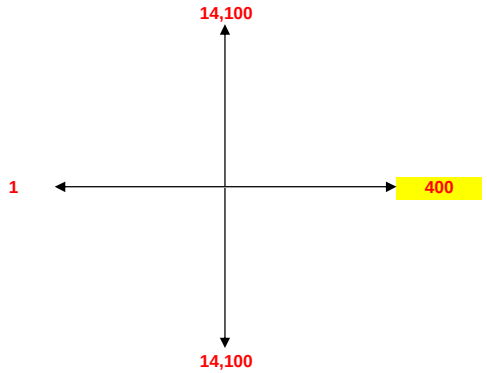
2016 Baseline Peak Hour Turning Movement Volumes (AM)



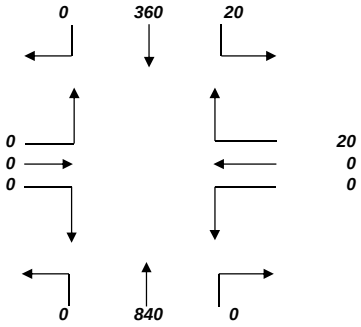
2016 Baseline ADTs



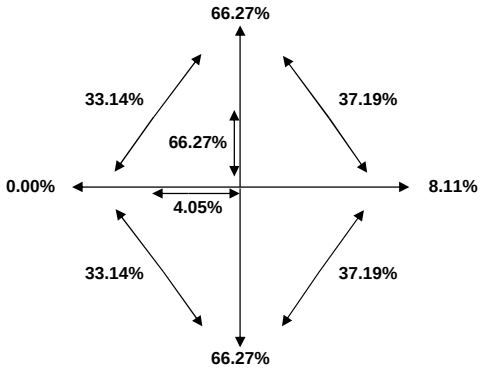
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

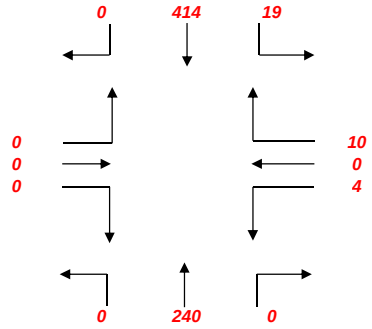


Build Conditions

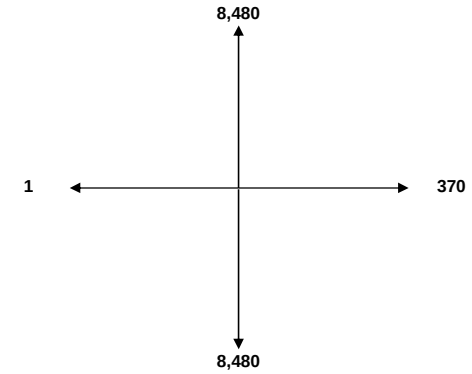
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

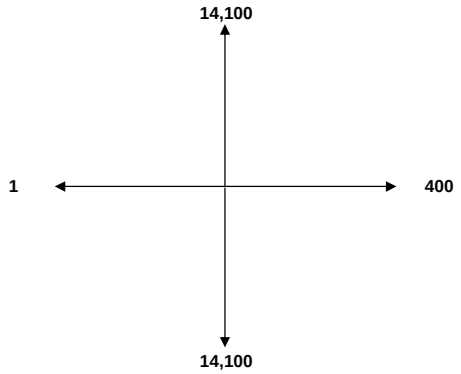
2016 Baseline Peak Hour Turning Movement Volumes (PM)



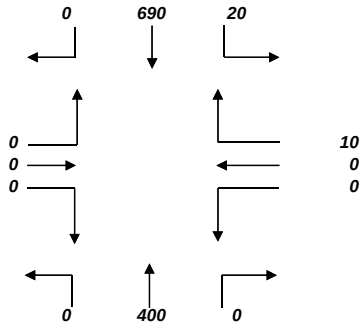
2016 Baseline ADTs



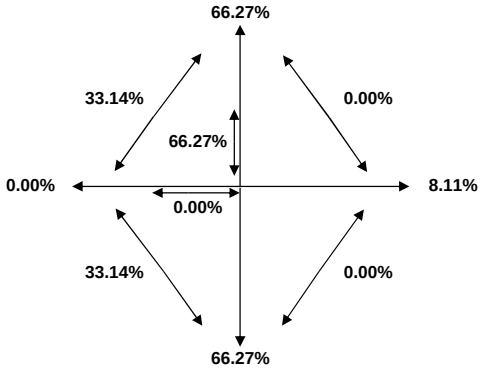
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

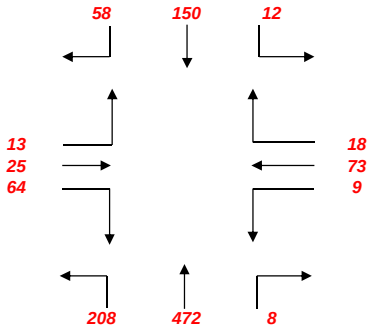


Build Conditions

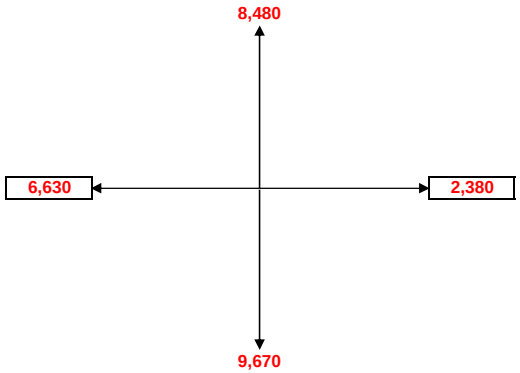
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

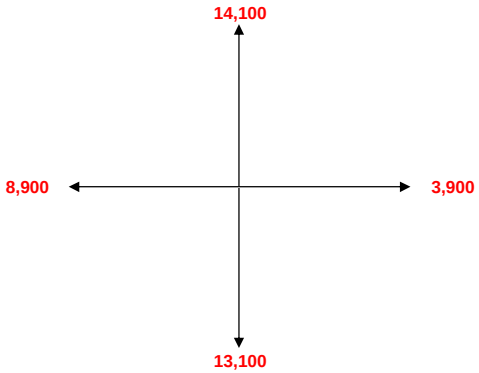
2016 Baseline Peak Hour Turning Movement Volumes (AM)



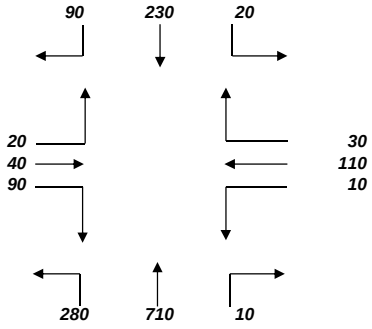
2016 Baseline ADTs



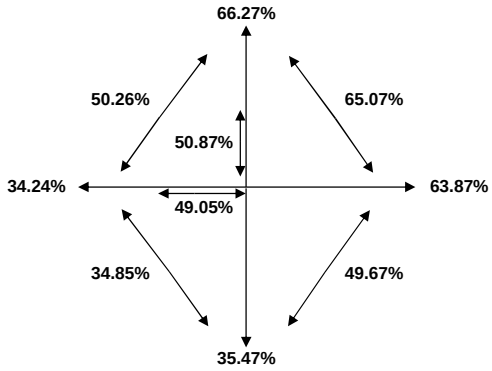
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

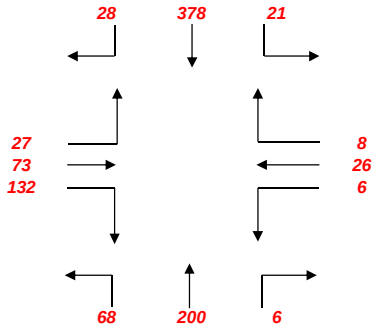


Build Conditions

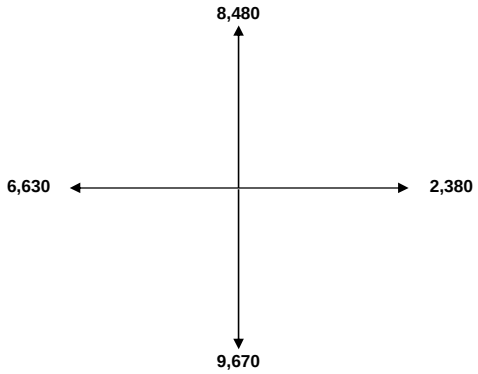
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

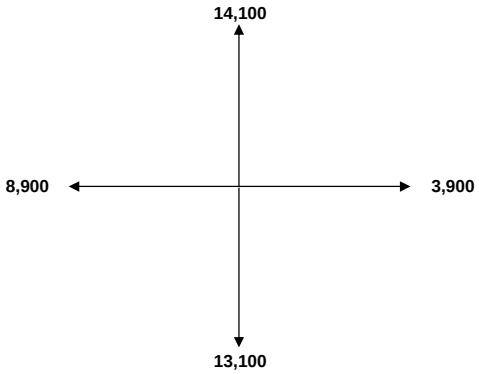
2016 Baseline Peak Hour Turning Movement Volumes (PM)



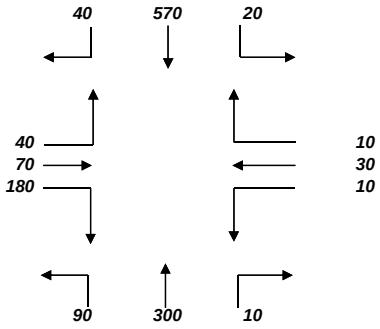
2016 Baseline ADTs



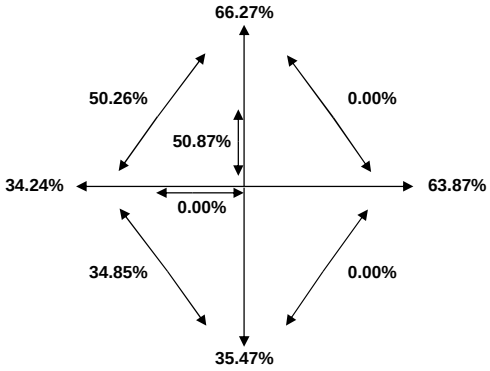
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

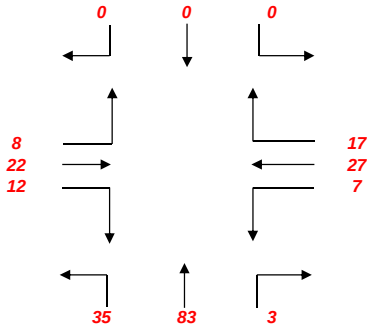


Build Conditions

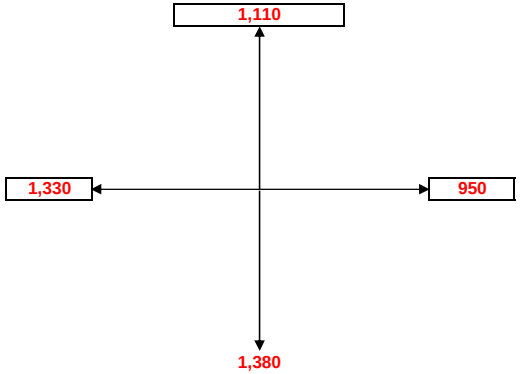
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

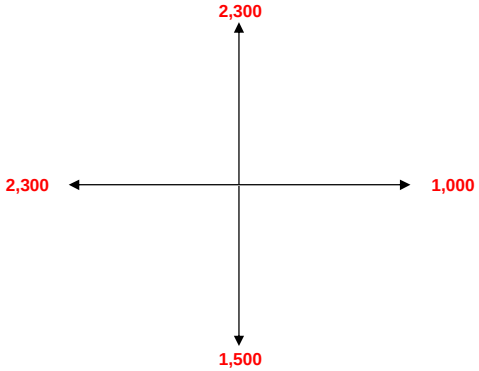
2016 Baseline Peak Hour Turning Movement Volumes (AM)



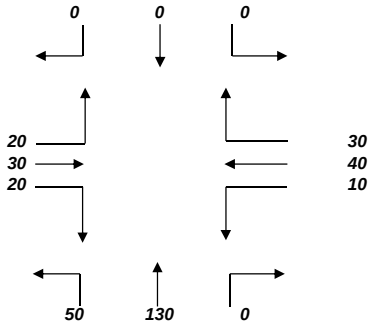
2016 Baseline ADTs



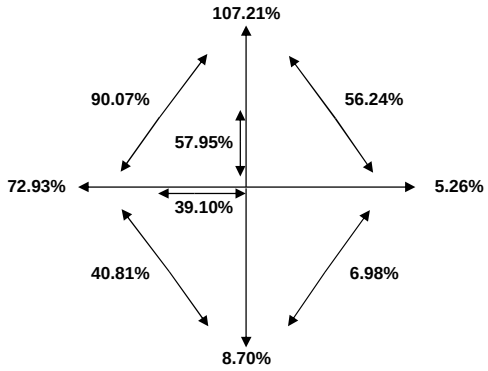
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

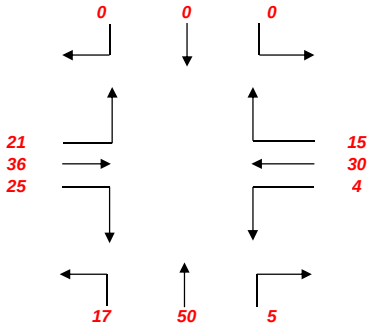


Build Conditions

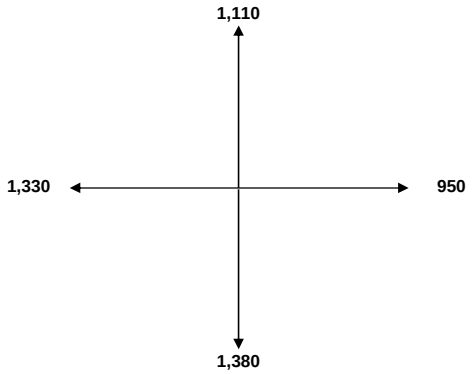
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

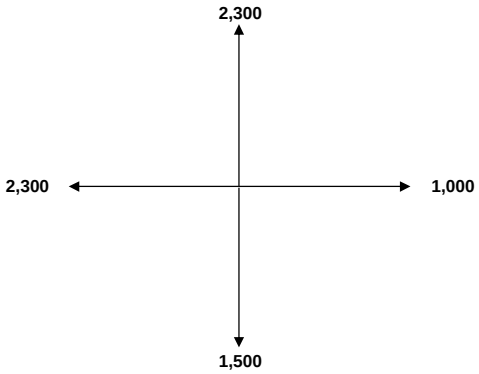
2016 Baseline Peak Hour Turning Movement Volumes (PM)



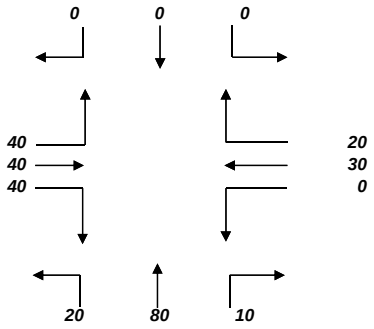
2016 Baseline ADTs



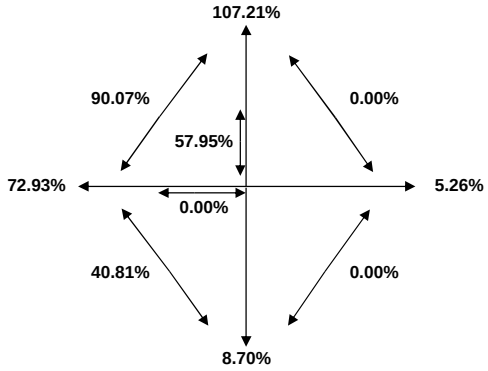
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

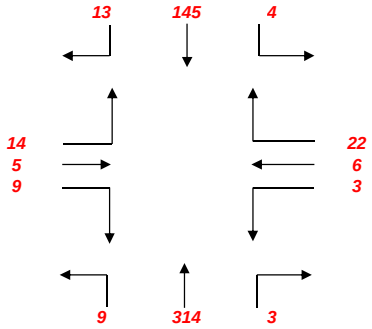


Build Conditions

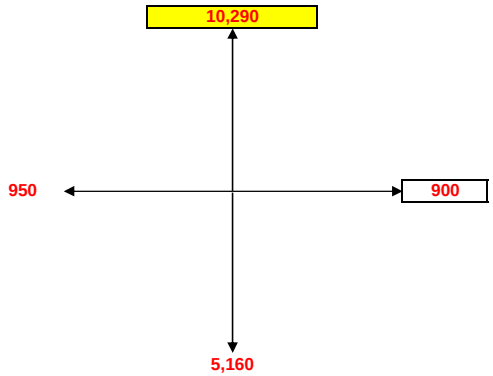
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

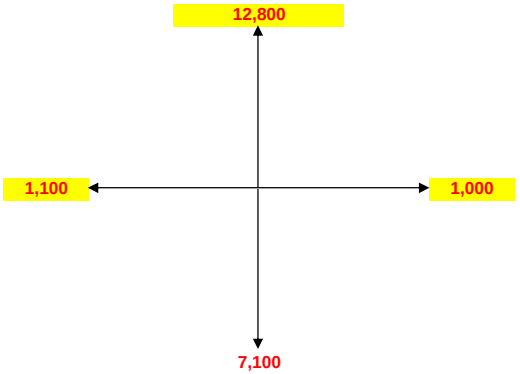
2016 Baseline Peak Hour Turning Movement Volumes (AM)



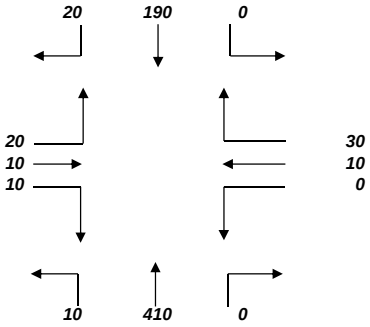
2016 Baseline ADTs



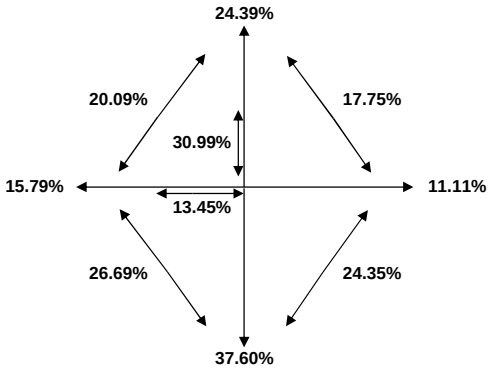
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

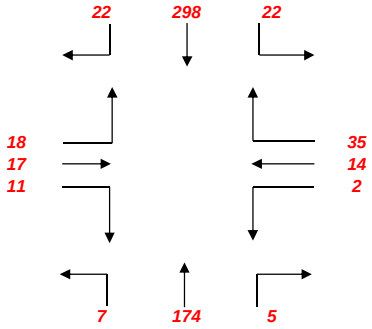


Build Conditions

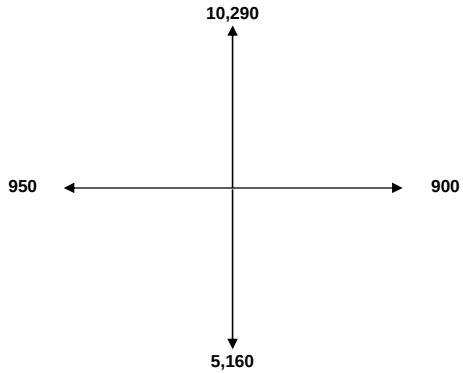
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

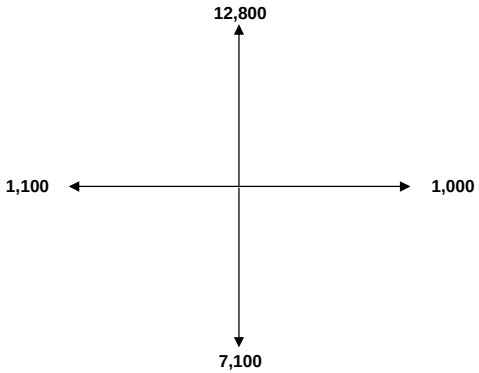
2016 Baseline Peak Hour Turning Movement Volumes (PM)



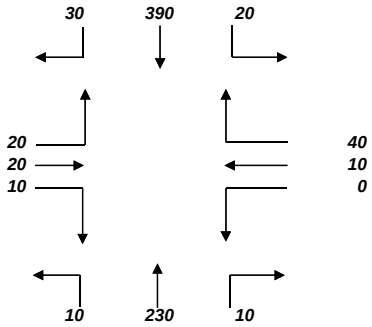
2016 Baseline ADTs



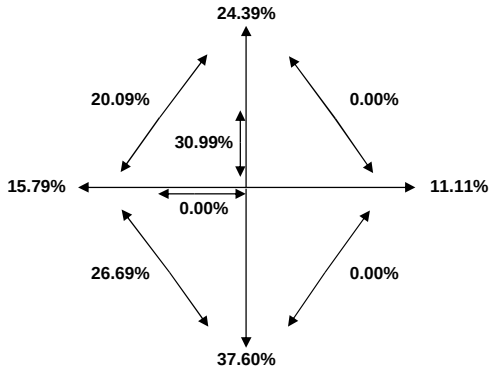
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

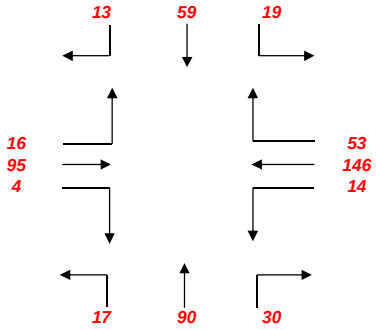


Build Conditions

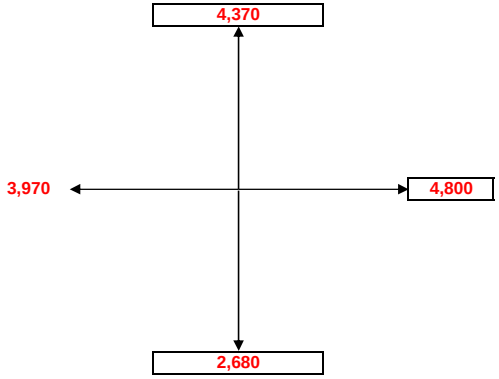
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

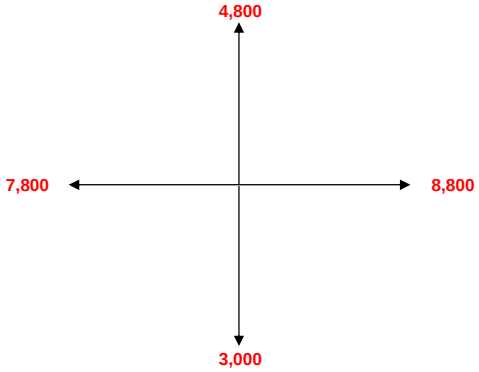
2016 Baseline Peak Hour Turning Movement Volumes (AM)



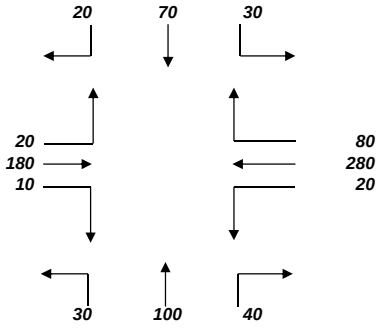
2016 Baseline ADTs



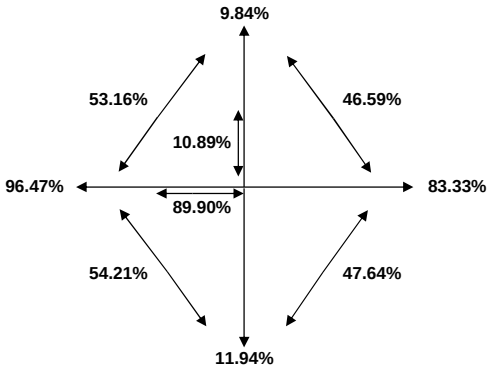
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

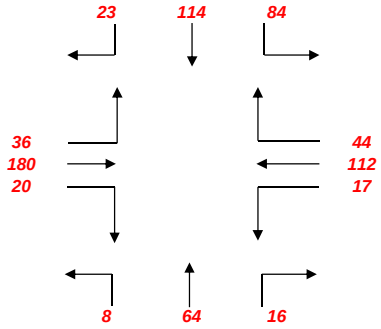


Build Conditions

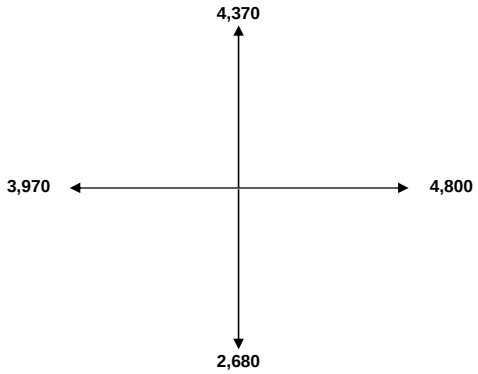
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

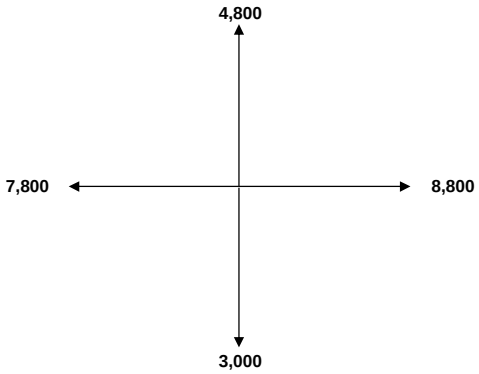
2016 Baseline Peak Hour Turning Movement Volumes (PM)



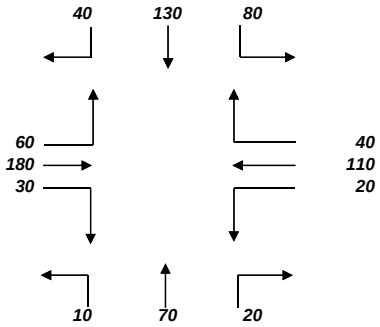
2016 Baseline ADTs



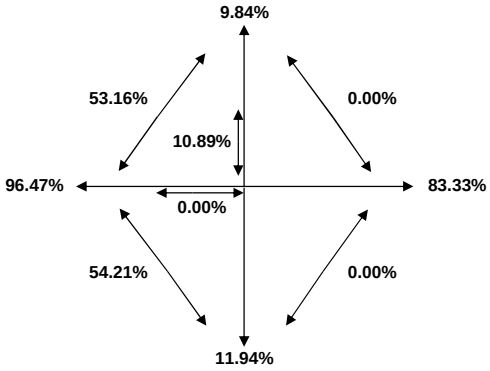
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

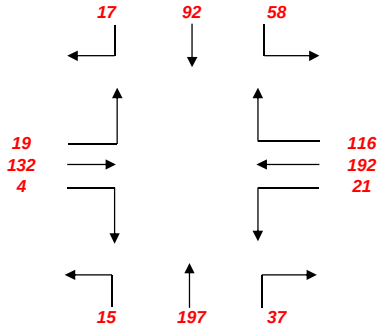


Build Conditions

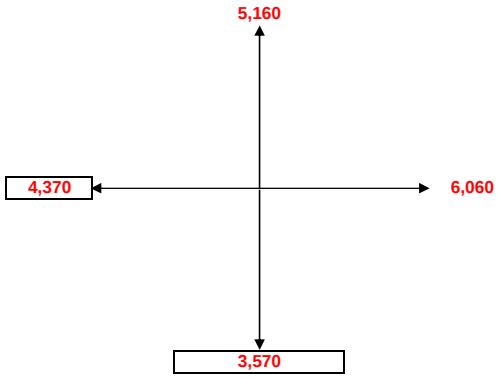
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

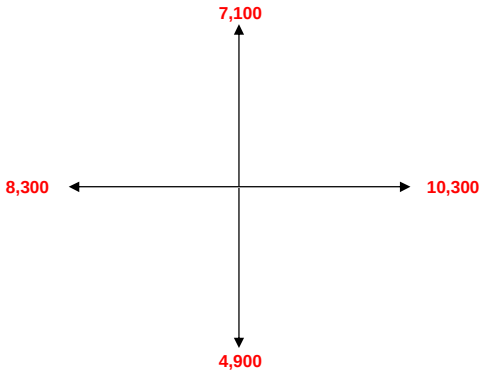
2016 Baseline Peak Hour Turning Movement Volumes (AM)



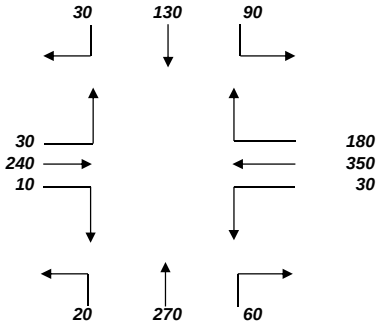
2016 Baseline ADTs



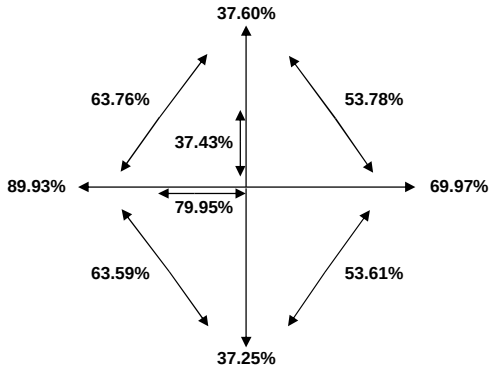
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

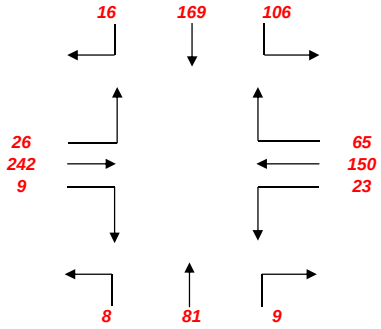


Build Conditions

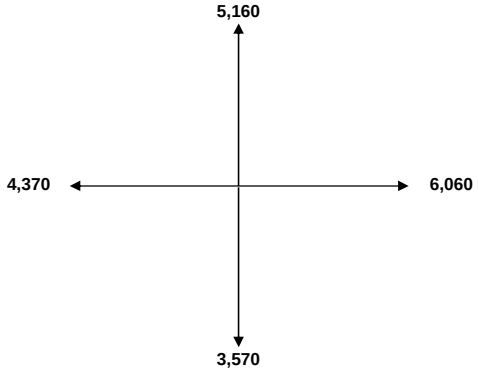
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

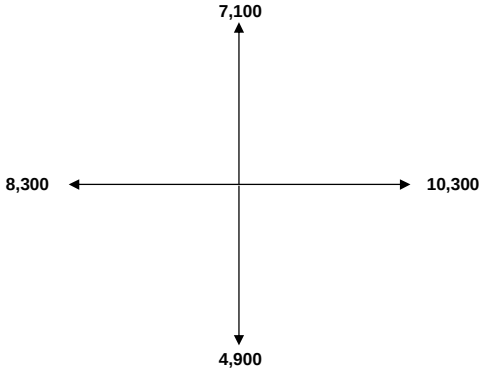
2016 Baseline Peak Hour Turning Movement Volumes (PM)



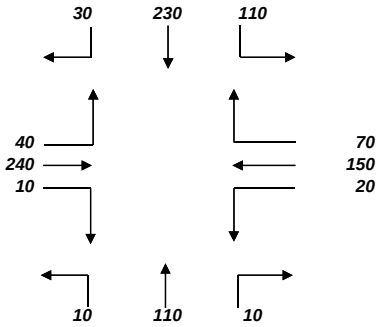
2016 Baseline ADTs



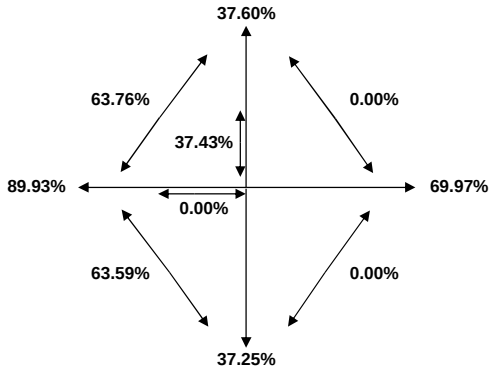
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

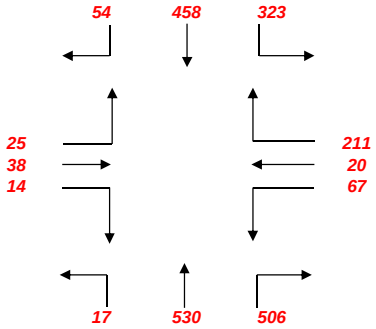


Build Conditions

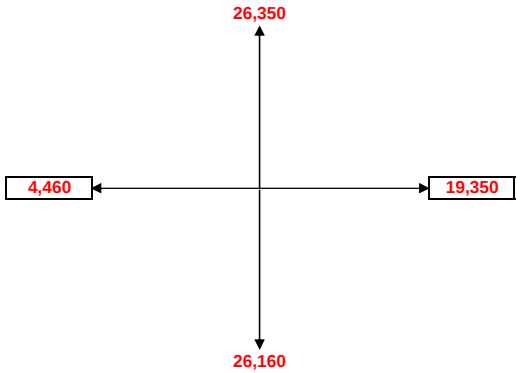
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbound Ramps

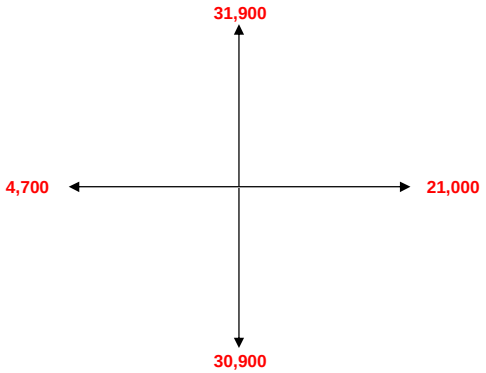
2016 Baseline Peak Hour Turning Movement Volumes (AM)



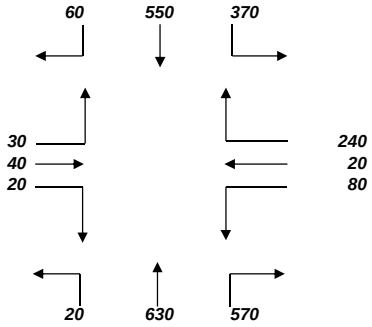
2016 Baseline ADTs



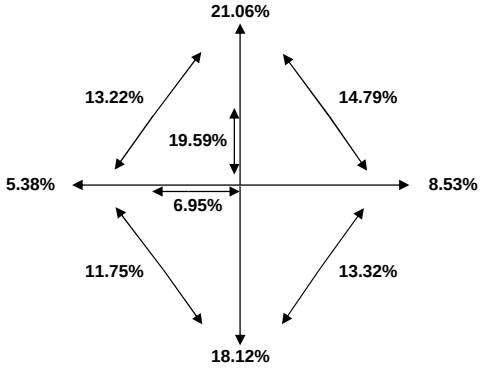
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

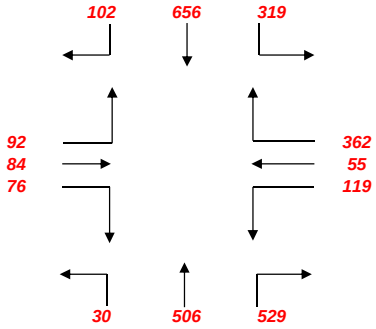


Build Conditions

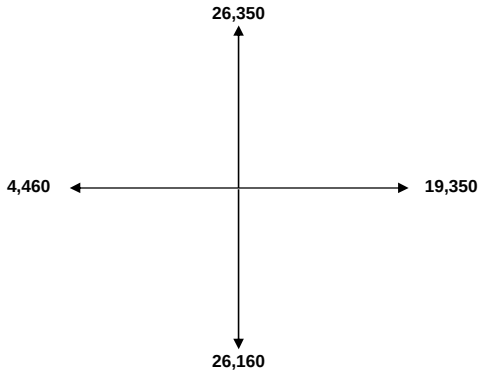
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Lemon Grove Plaza/SR-94 Eastbo

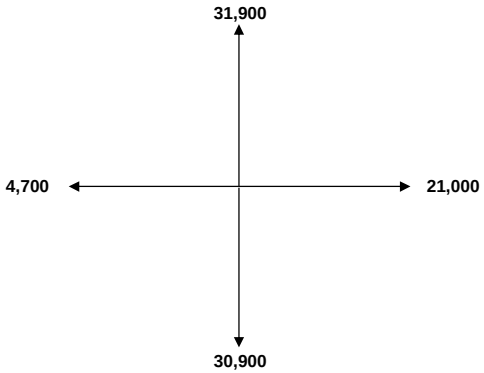
2016 Baseline Peak Hour Turning Movement Volumes (PM)



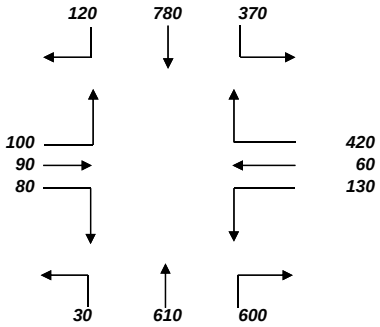
2016 Baseline ADTs



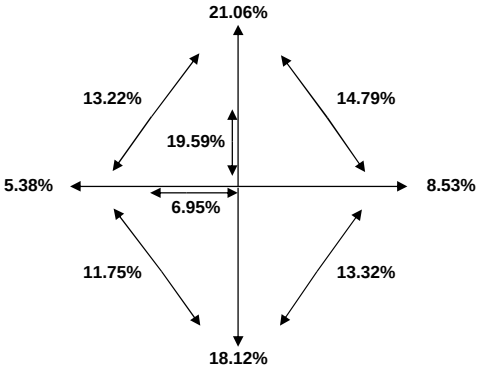
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

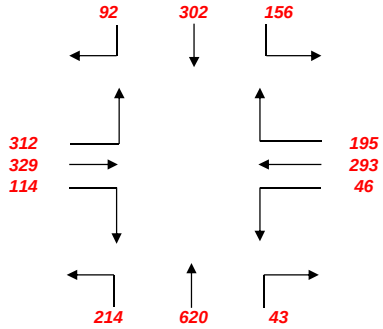


Build Conditions

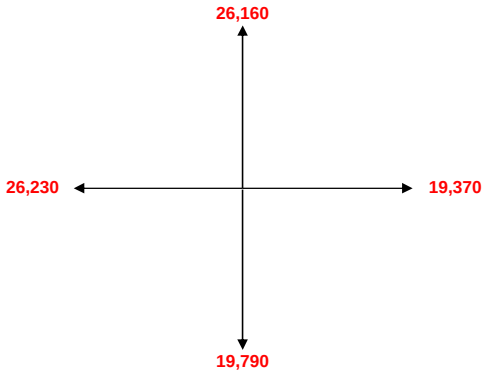
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

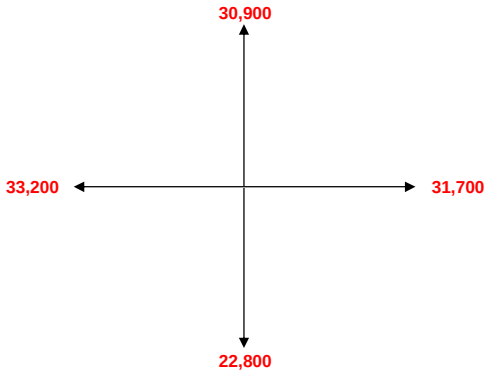
2016 Baseline Peak Hour Turning Movement Volumes (AM)



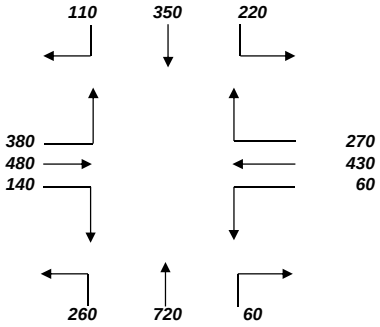
2016 Baseline ADTs



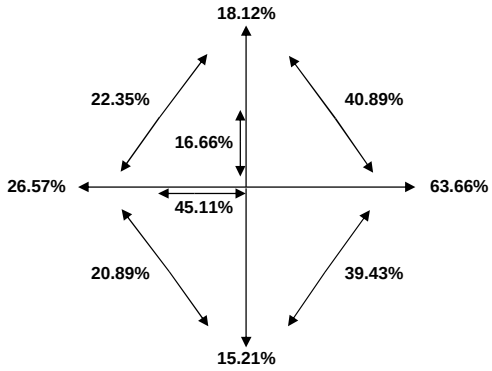
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

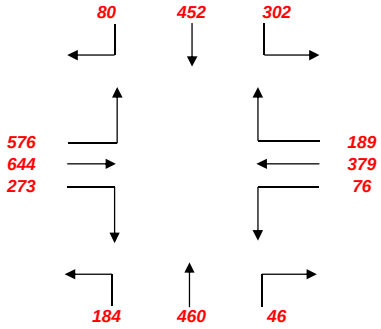


Build Conditions

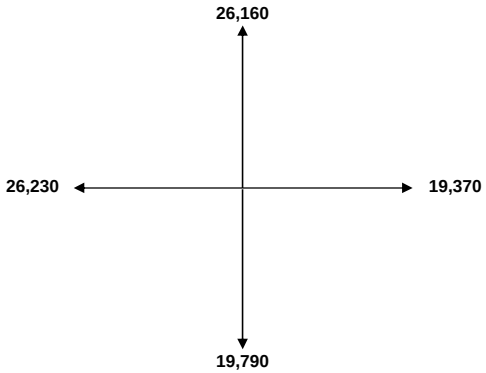
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Broadway

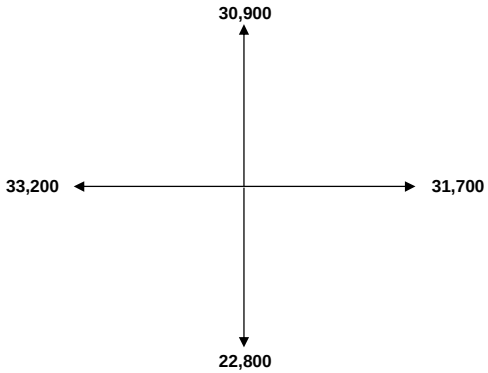
2016 Baseline Peak Hour Turning Movement Volumes (PM)



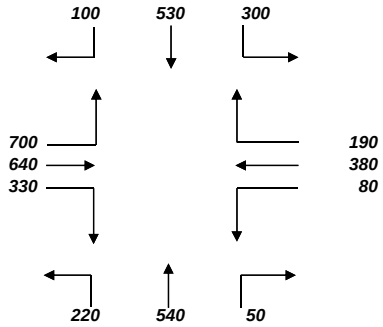
2016 Baseline ADTs



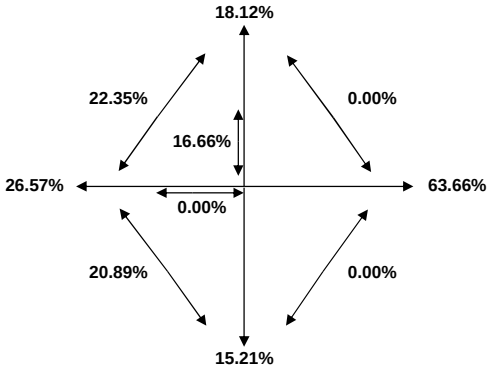
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

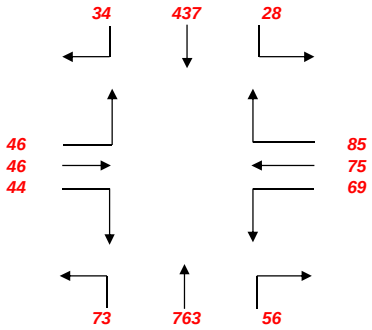


Build Conditions

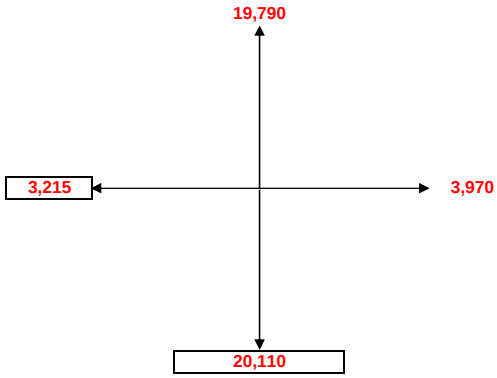
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

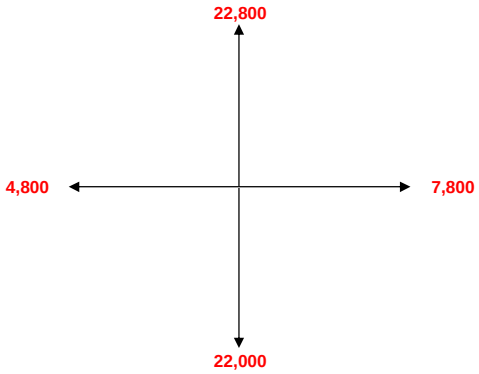
2016 Baseline Peak Hour Turning Movement Volumes (AM)



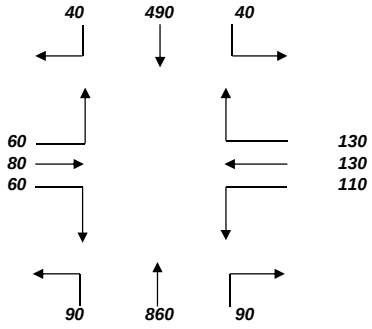
2016 Baseline ADTs



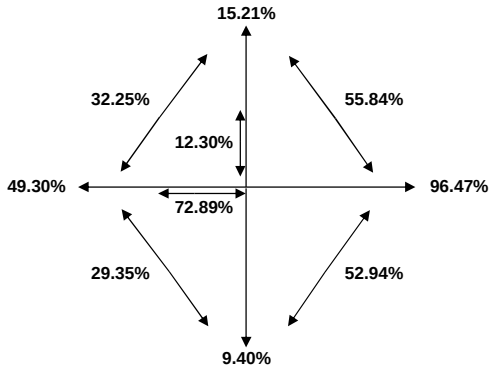
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

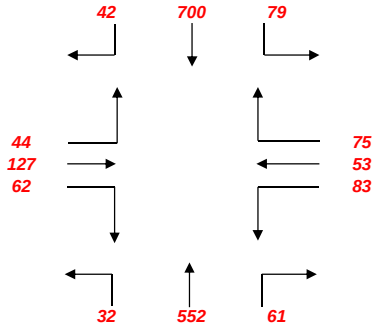


Build Conditions

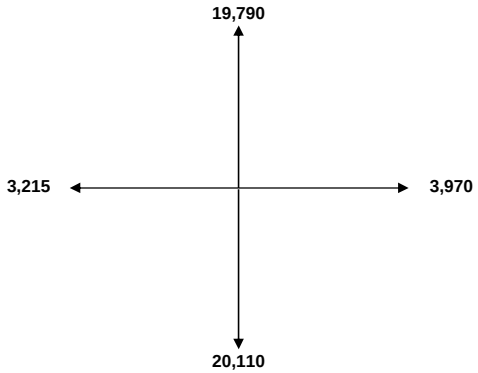
2035 Baseline Peak Hour Turning Movement Calculations

Massachusetts Avenue and Central Avenue

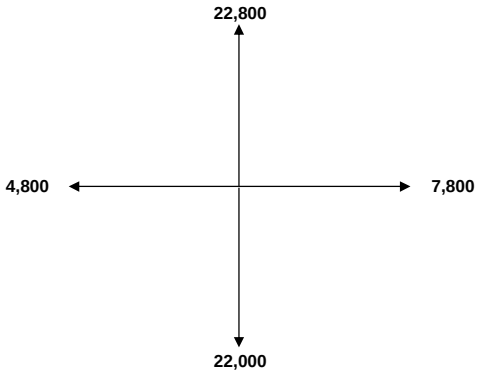
2016 Baseline Peak Hour Turning Movement Volumes (PM)



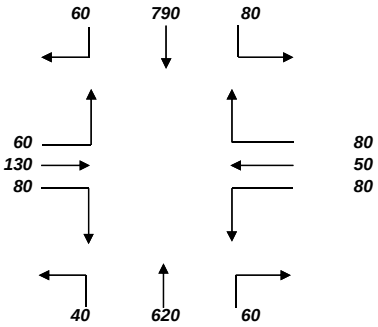
2016 Baseline ADTs



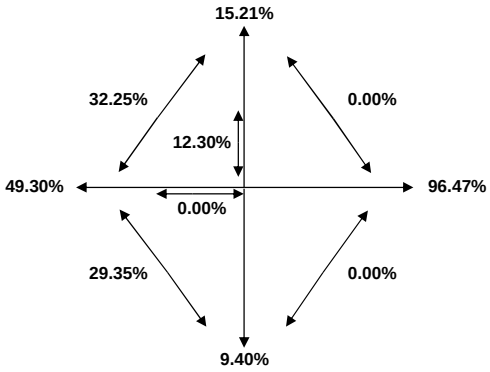
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

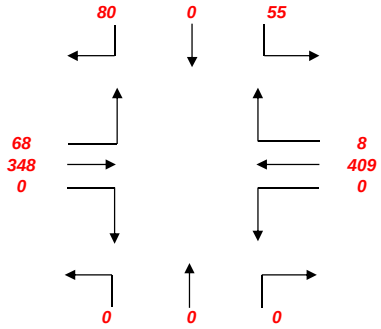


Build Conditions

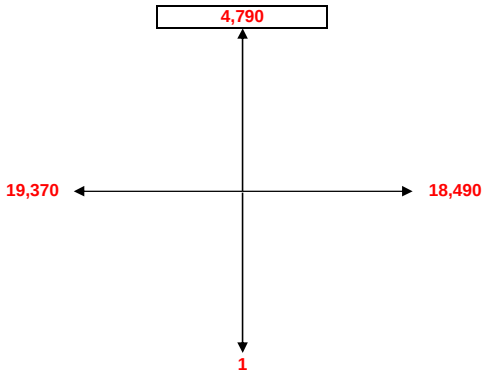
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

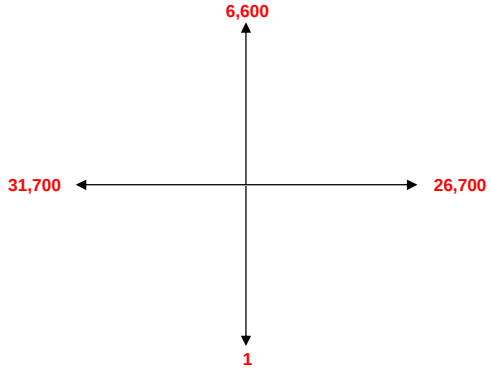
2016 Baseline Peak Hour Turning Movement Volumes (AM)



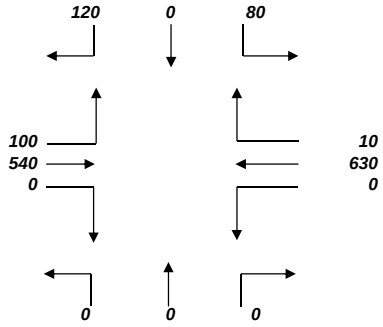
2016 Baseline ADTs



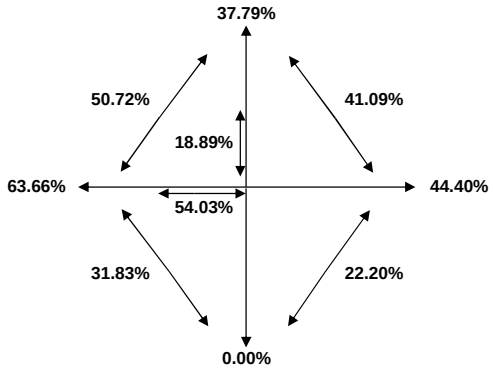
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

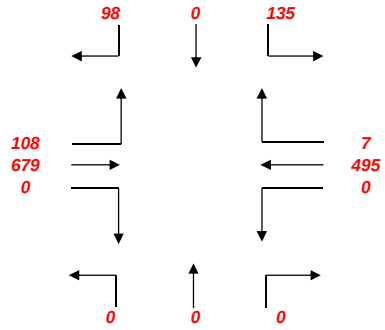


Build Conditions

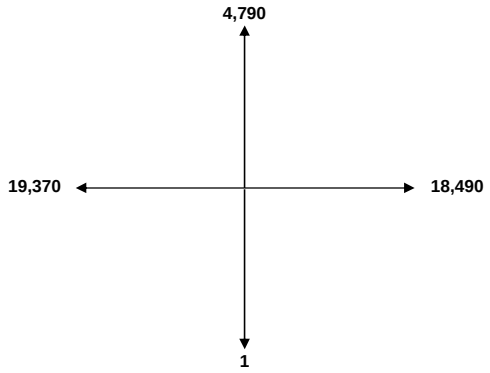
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and West Street

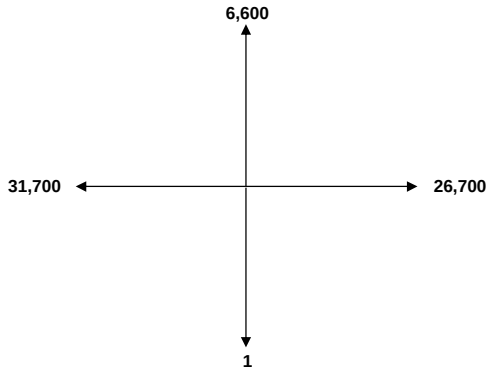
2016 Baseline Peak Hour Turning Movement Volumes (PM)



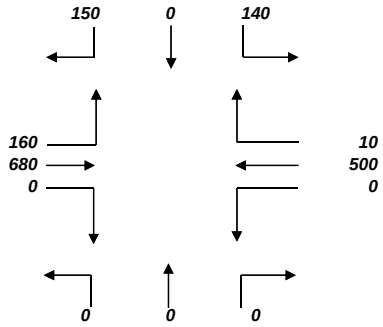
2016 Baseline ADTs



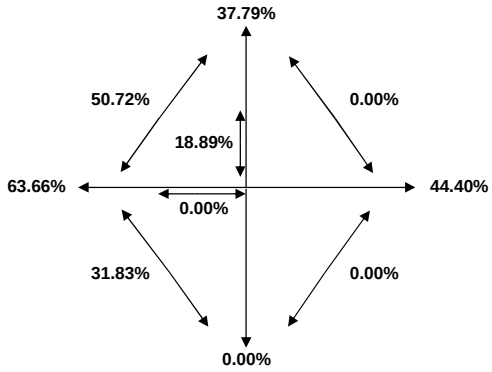
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

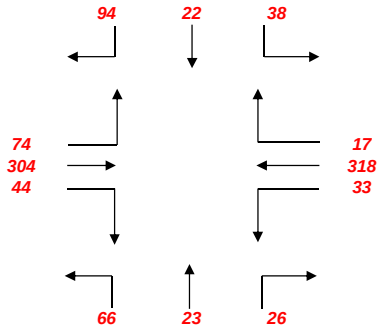


Build Conditions

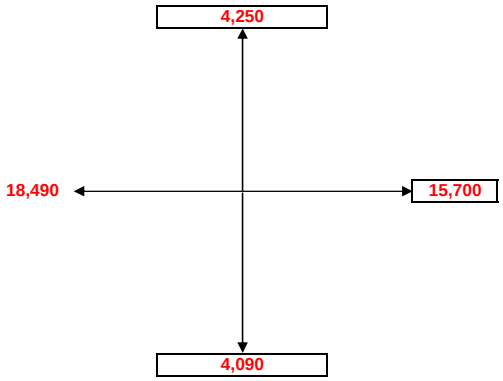
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

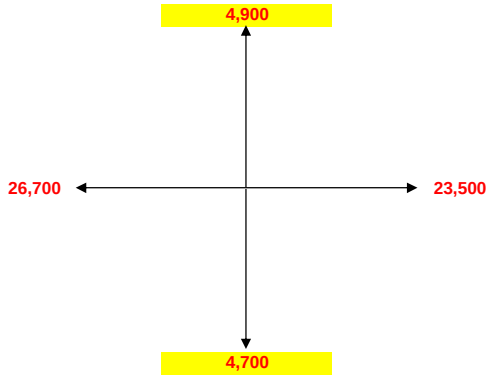
2016 Baseline Peak Hour Turning Movement Volumes (AM)



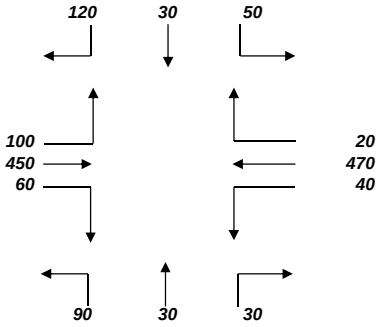
2016 Baseline ADTs



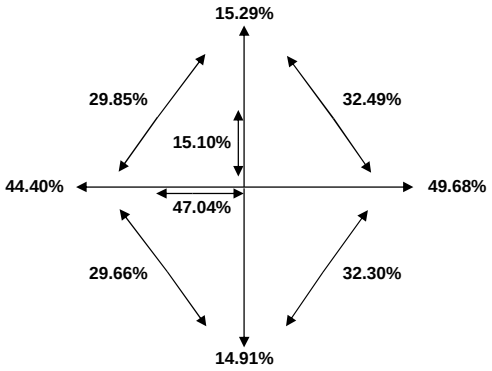
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

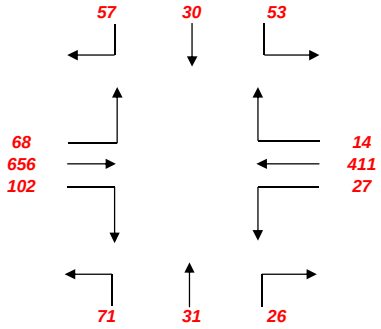


Build Conditions

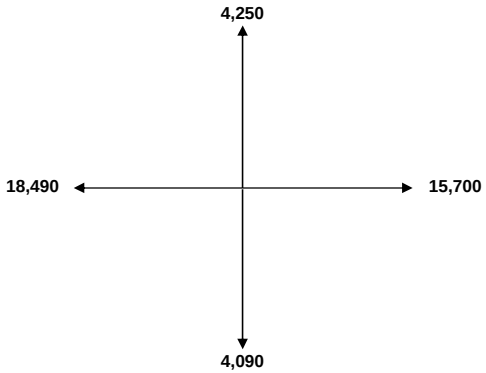
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue/Home Depot Driveway and Broadway

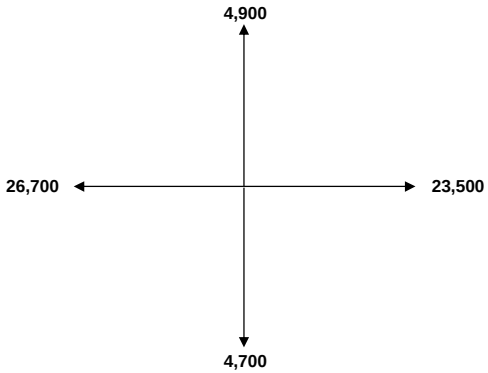
2016 Baseline Peak Hour Turning Movement Volumes (PM)



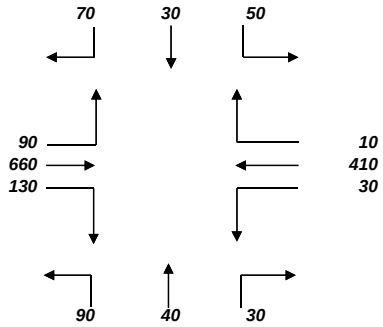
2016 Baseline ADTs



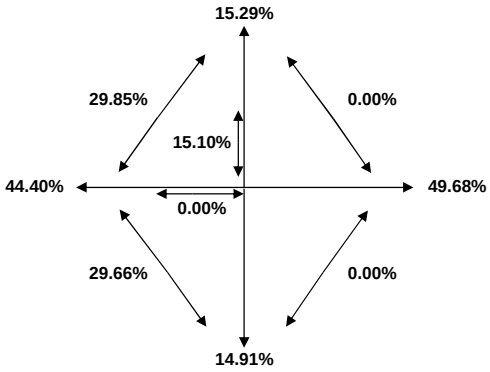
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

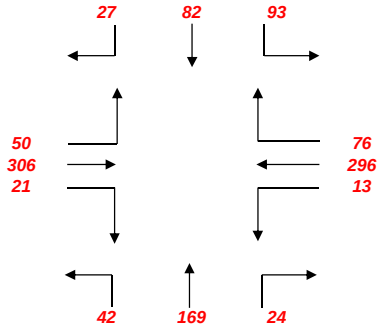


Build Conditions

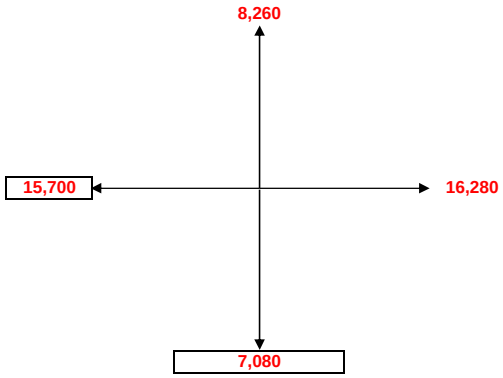
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

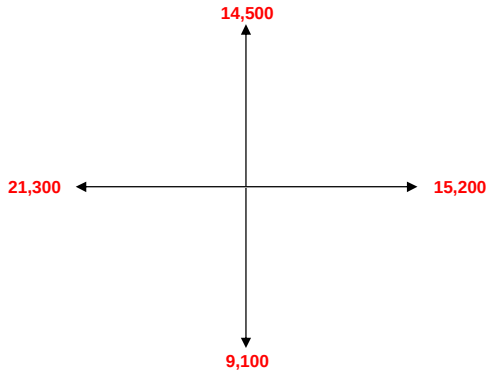
2016 Baseline Peak Hour Turning Movement Volumes (AM)



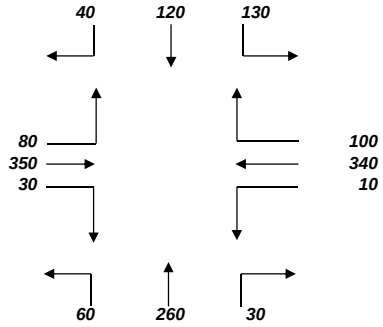
2016 Baseline ADTs



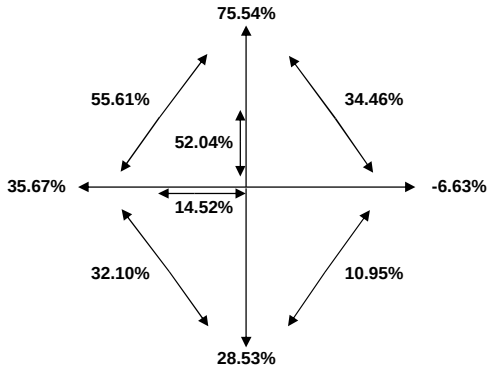
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

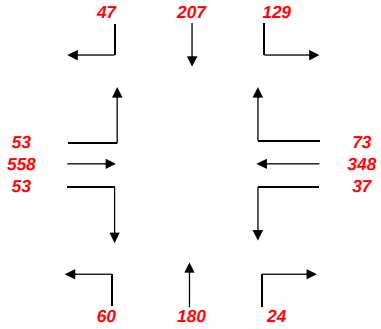


Build Conditions

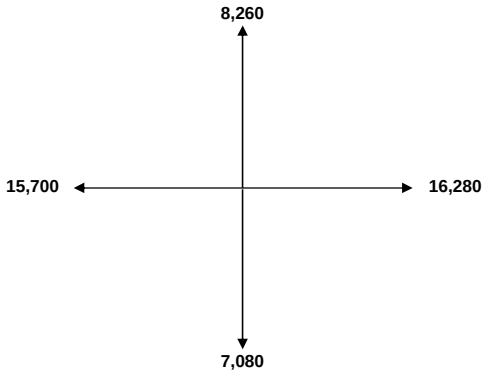
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Broadway

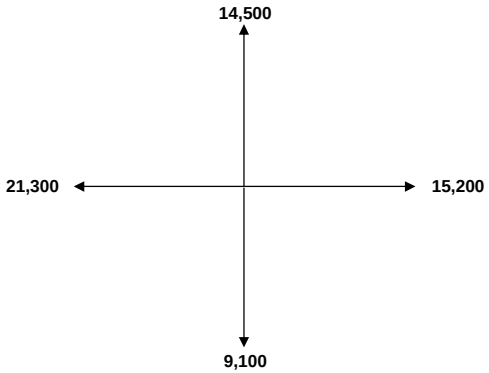
2016 Baseline Peak Hour Turning Movement Volumes (PM)



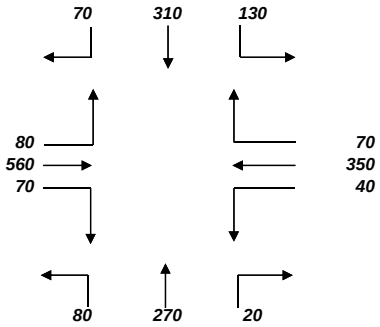
2016 Baseline ADTs



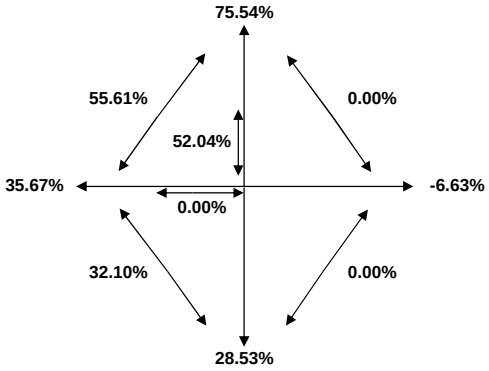
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

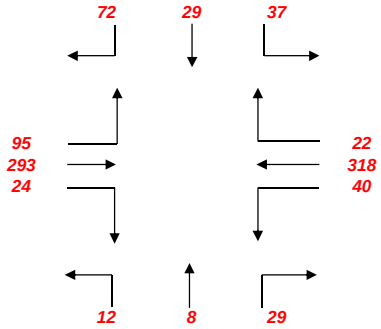


Build Conditions

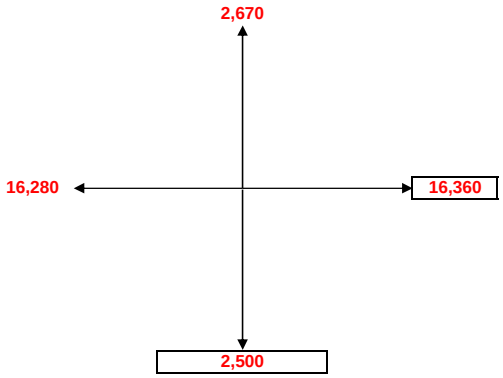
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

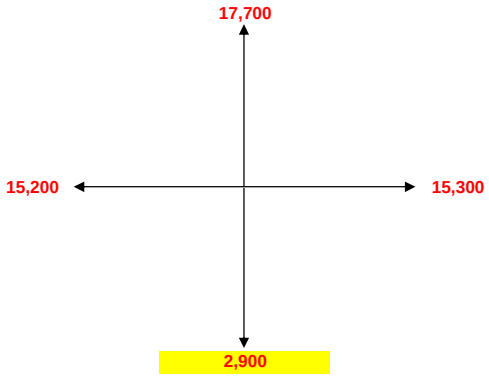
2016 Baseline Peak Hour Turning Movement Volumes (AM)



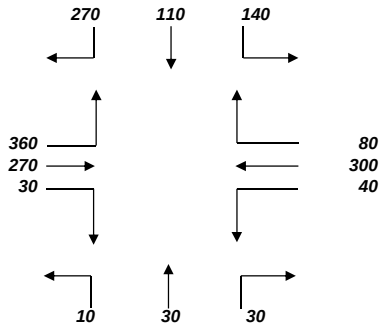
2016 Baseline ADTs



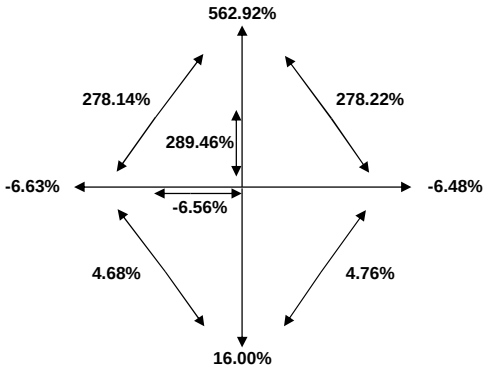
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

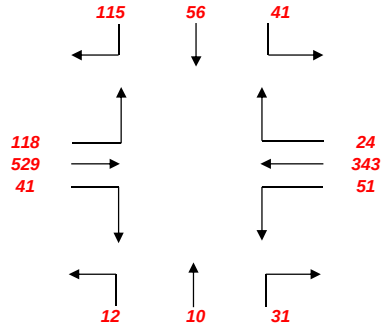


Build Conditions

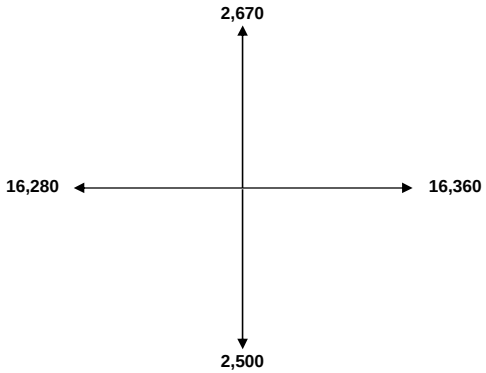
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and Broadway

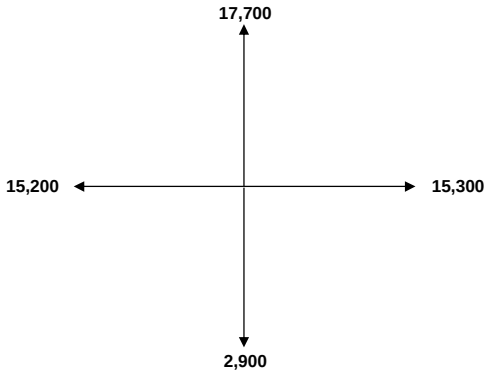
2016 Baseline Peak Hour Turning Movement Volumes (PM)



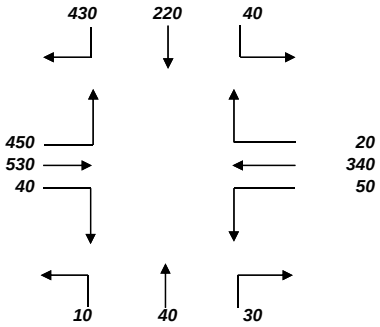
2016 Baseline ADTs



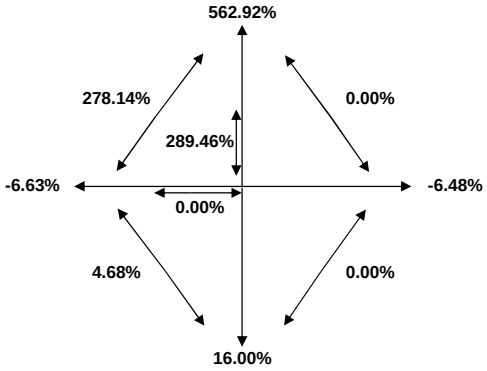
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

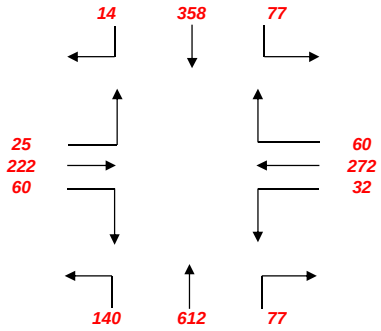


Build Conditions

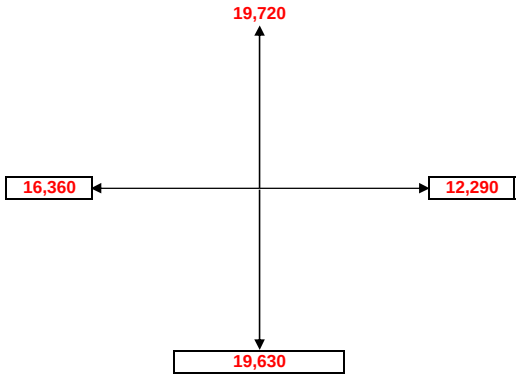
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

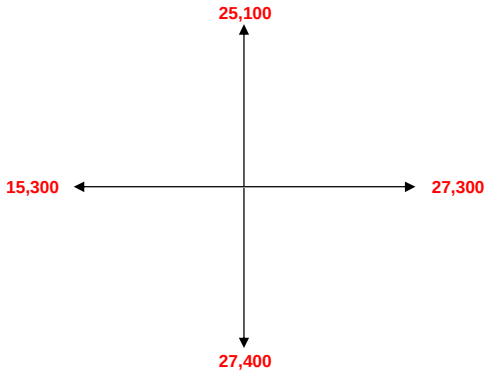
2016 Baseline Peak Hour Turning Movement Volumes (AM)



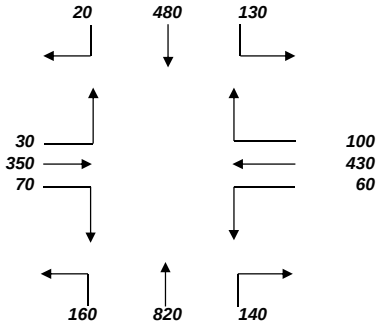
2016 Baseline ADTs



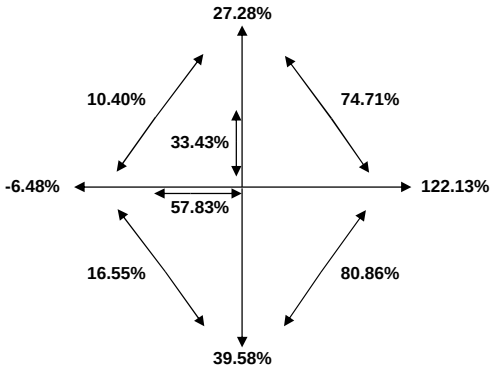
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

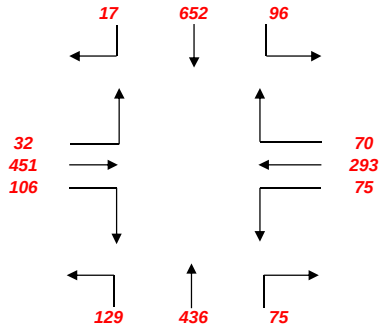


Build Conditions

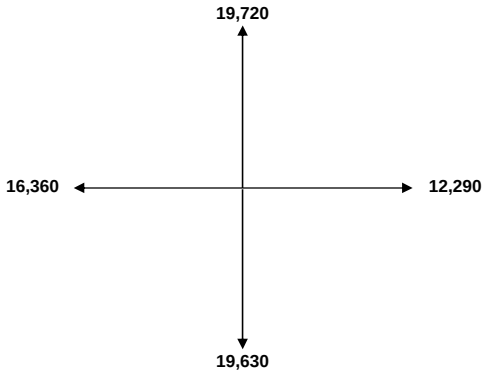
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Broadway

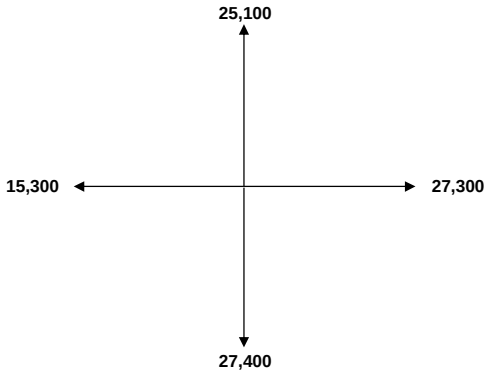
2016 Baseline Peak Hour Turning Movement Volumes (PM)



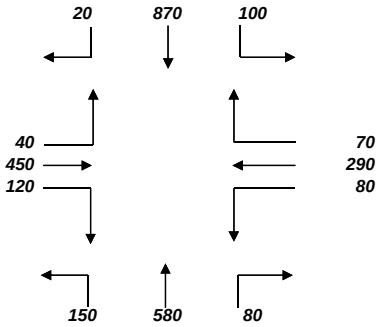
2016 Baseline ADTs



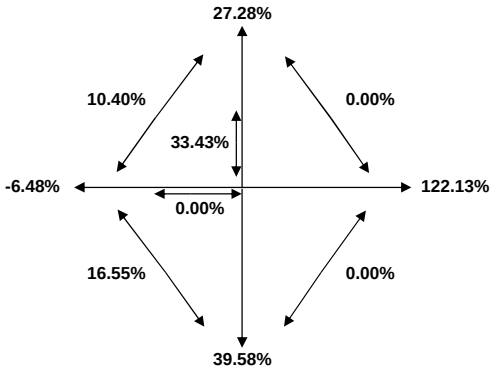
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

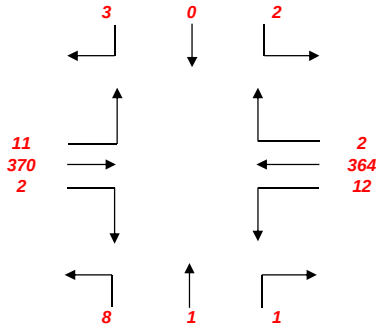


Build Conditions

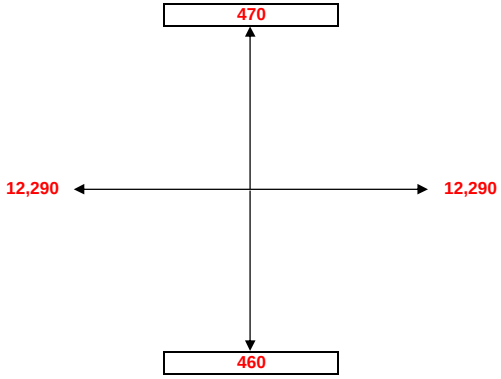
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

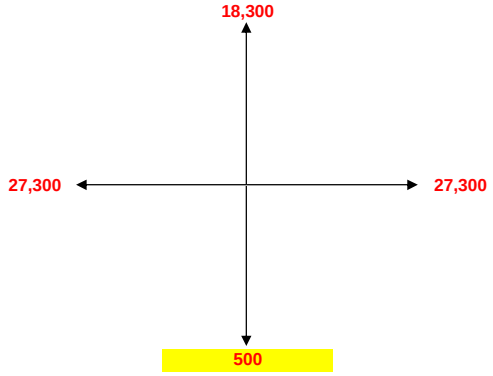
2016 Baseline Peak Hour Turning Movement Volumes (AM)



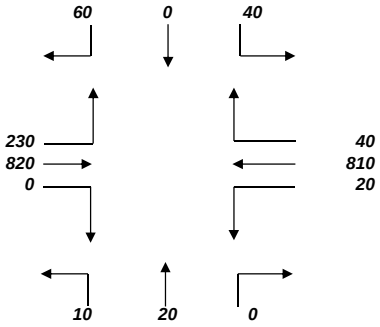
2016 Baseline ADTs



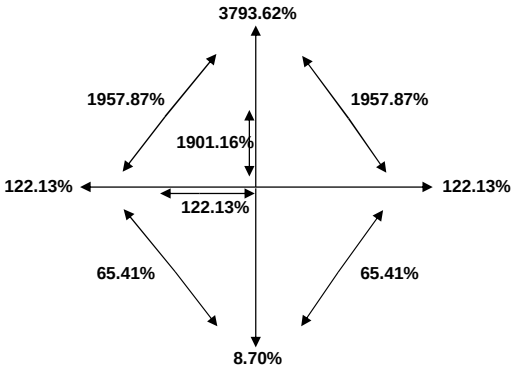
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

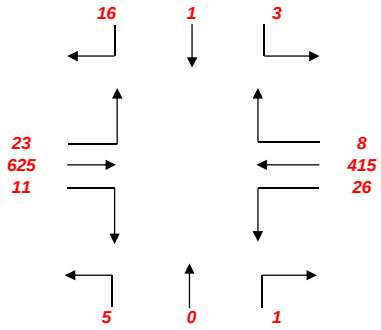


Build Conditions

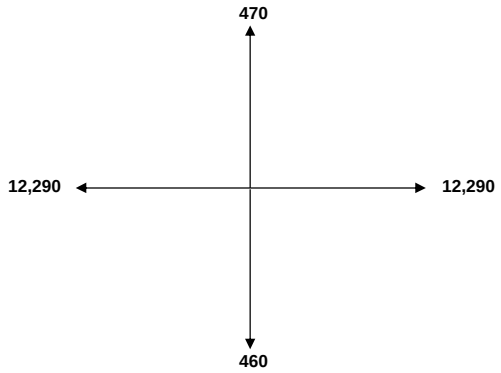
2035 Baseline Peak Hour Turning Movement Calculations

Driveway/Mid-block X-walk and Driveway and Broadway

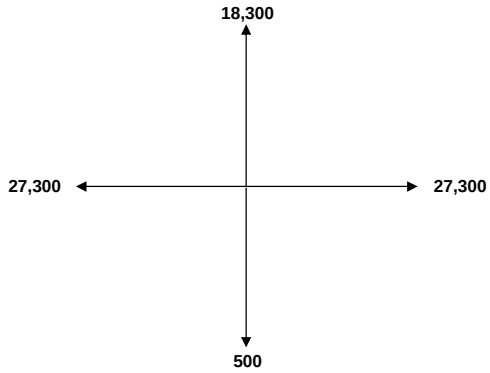
2016 Baseline Peak Hour Turning Movement Volumes (PM)



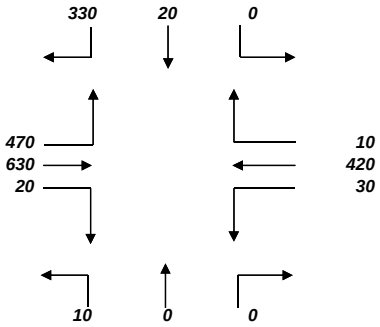
2016 Baseline ADTs



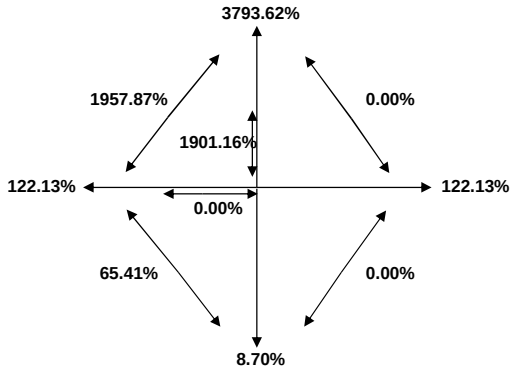
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

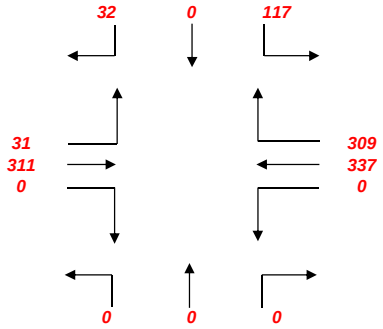


Build Conditions

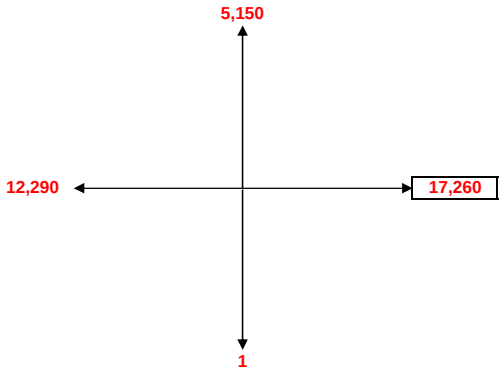
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

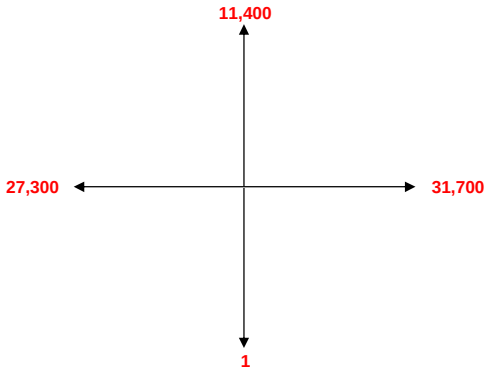
2016 Baseline Peak Hour Turning Movement Volumes (AM)



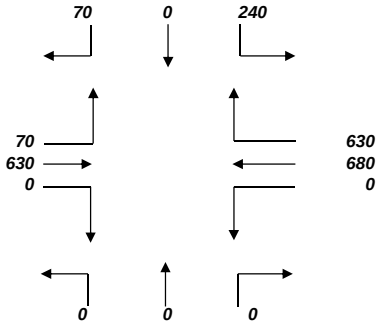
2016 Baseline ADTs



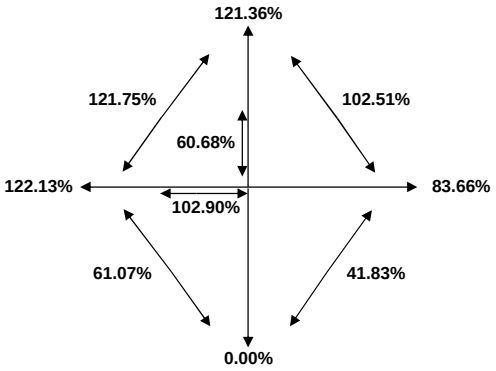
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

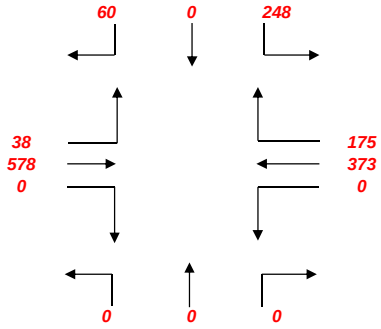


Build Conditions

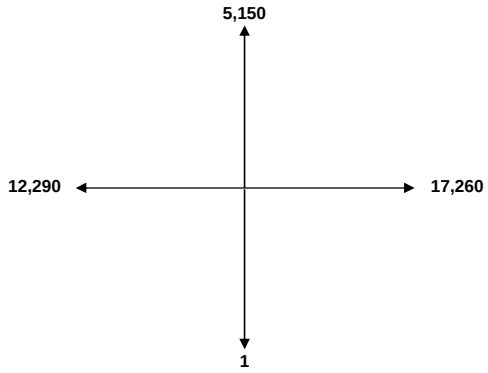
2035 Baseline Peak Hour Turning Movement Calculations

Broadway and Grove Street

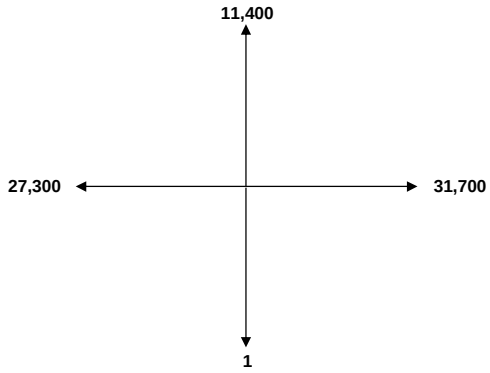
2016 Baseline Peak Hour Turning Movement Volumes (PM)



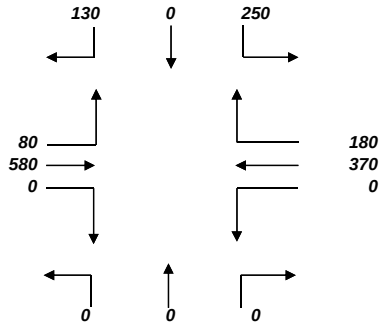
2016 Baseline ADTs



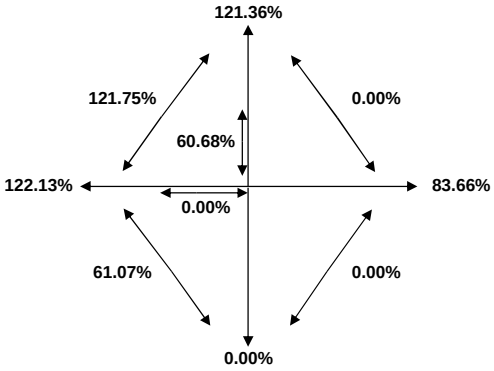
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

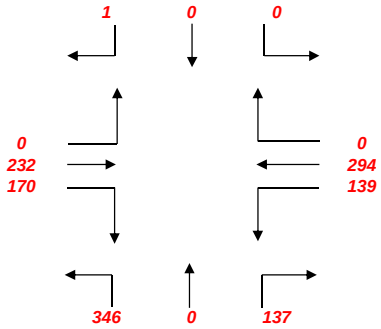


Build Conditions

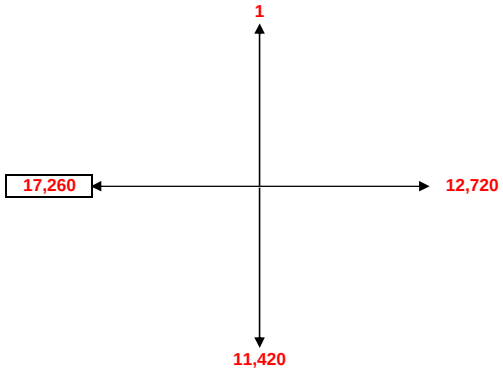
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

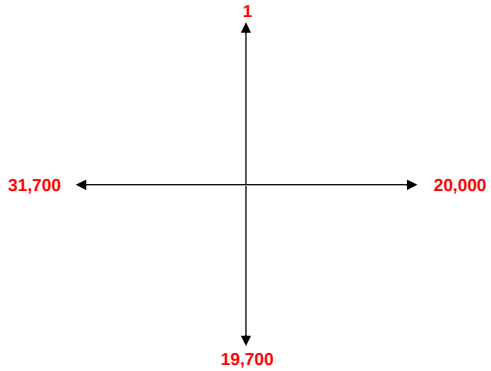
2016 Baseline Peak Hour Turning Movement Volumes (AM)



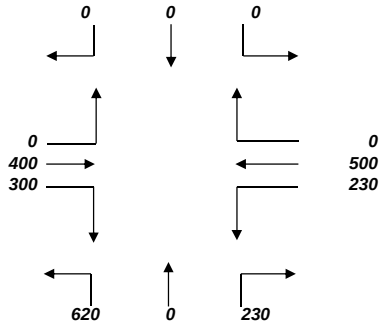
2016 Baseline ADTs



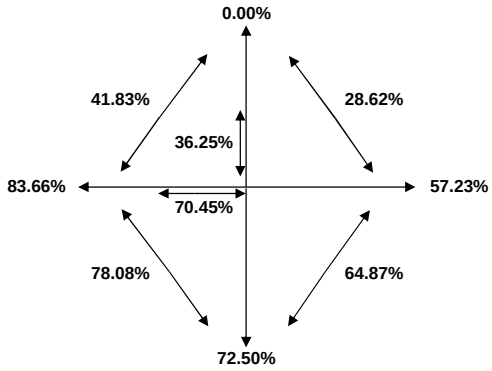
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

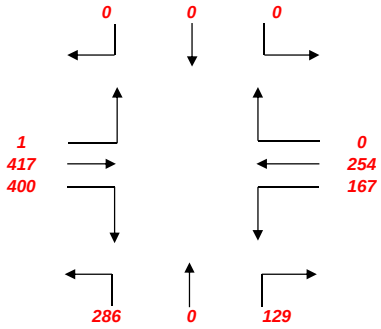


Build Conditions

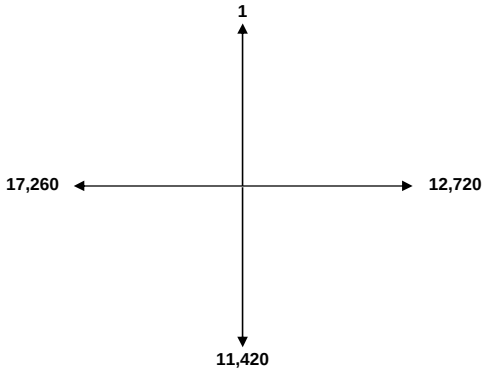
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street/Driveway and Broadway

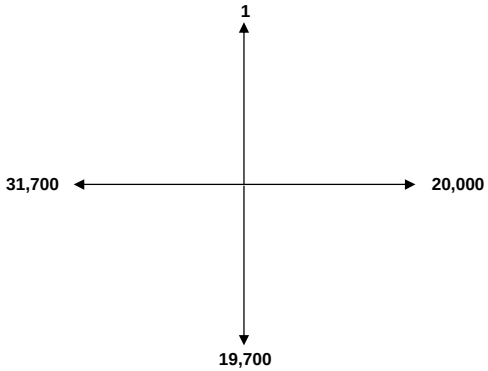
2016 Baseline Peak Hour Turning Movement Volumes (PM)



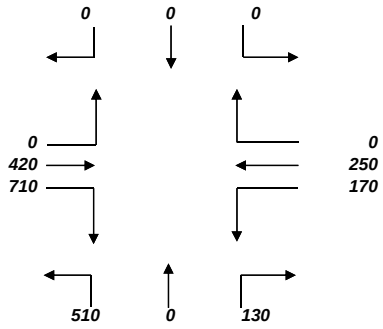
2016 Baseline ADTs



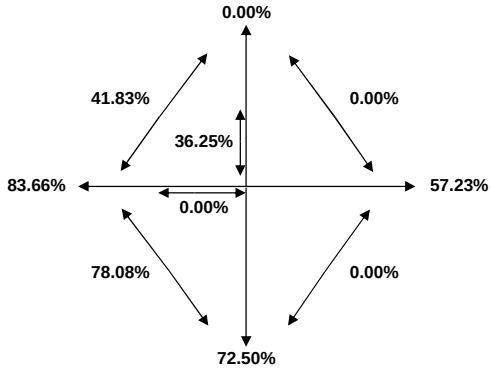
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

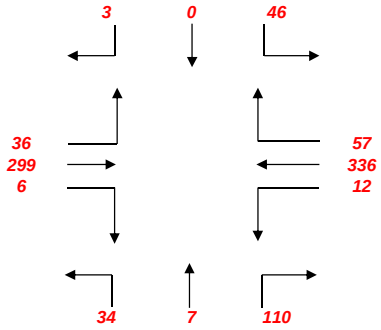


Build Conditions

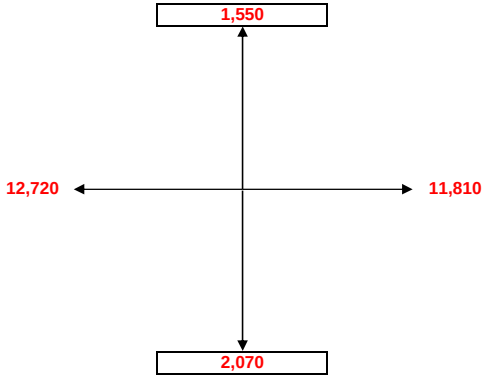
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

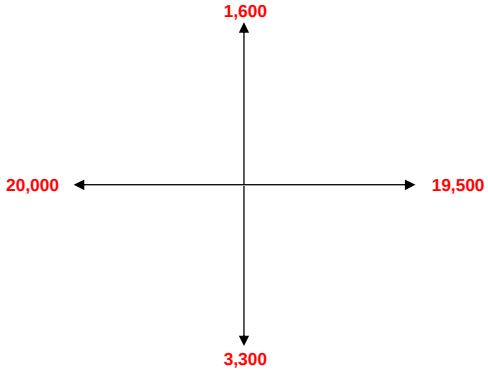
2016 Baseline Peak Hour Turning Movement Volumes (AM)



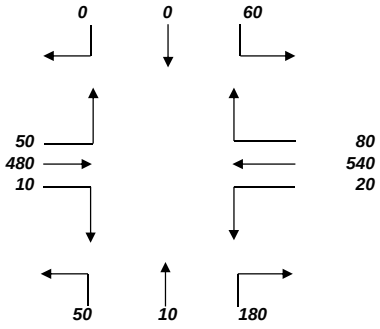
2016 Baseline ADTs



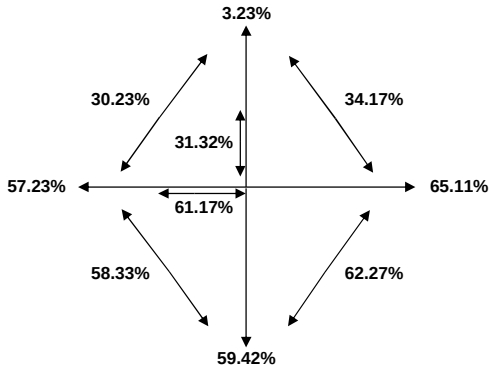
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

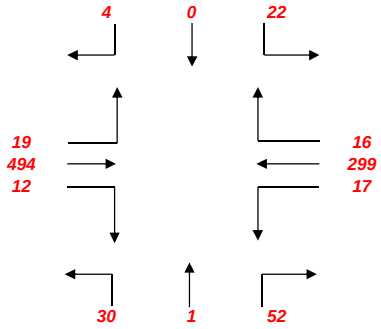


Build Conditions

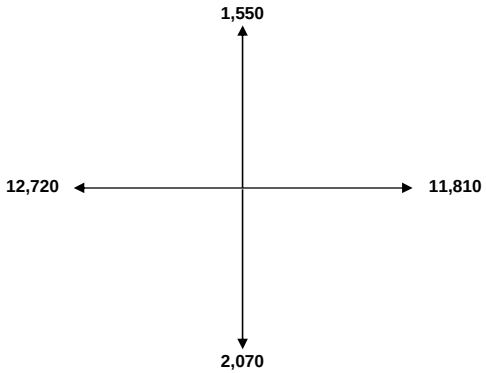
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street/Columbus Place and Broadway

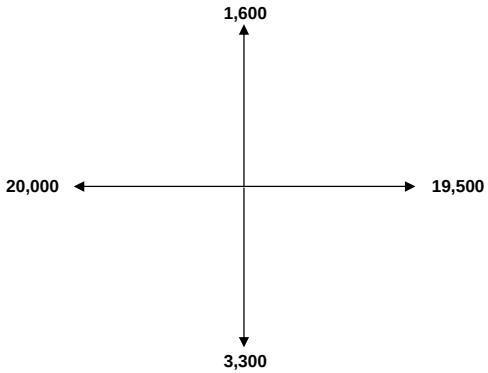
2016 Baseline Peak Hour Turning Movement Volumes (PM)



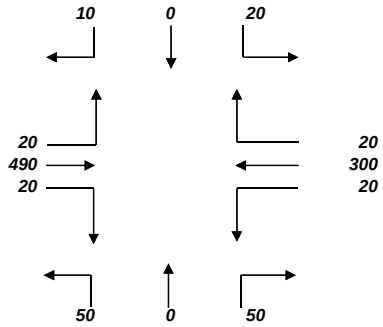
2016 Baseline ADTs



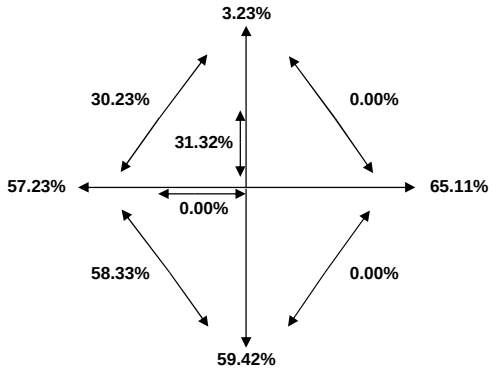
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

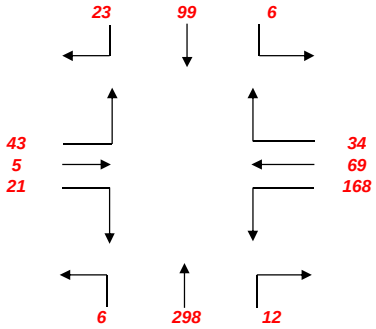


Build Conditions

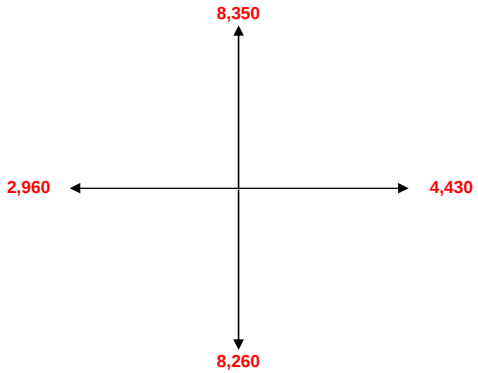
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

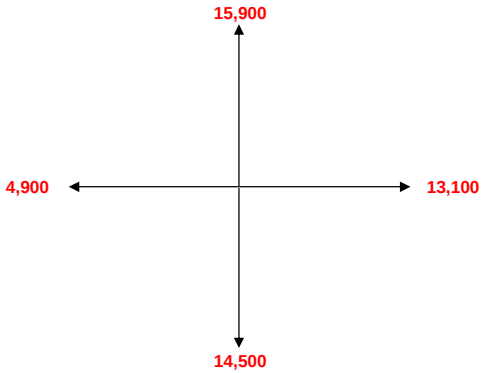
2016 Baseline Peak Hour Turning Movement Volumes (AM)



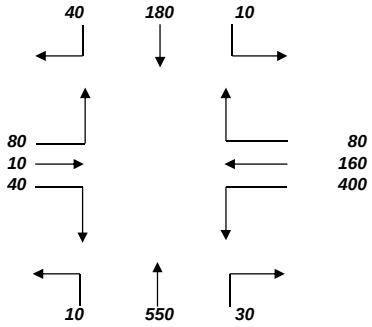
2016 Baseline ADTs



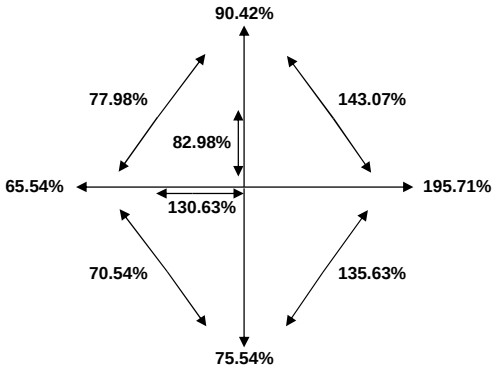
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

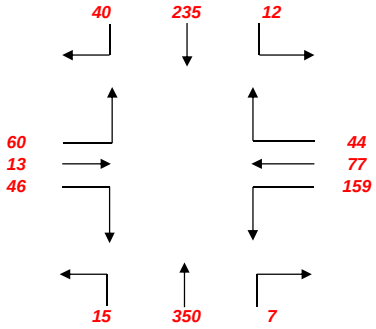


Build Conditions

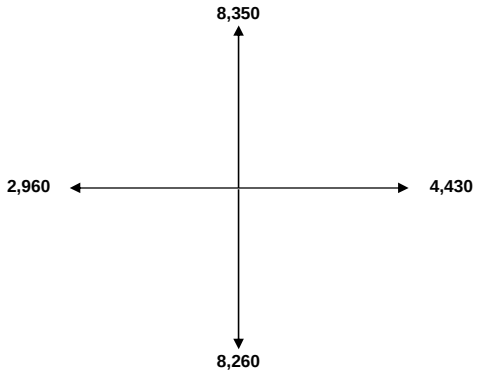
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and North Avenue

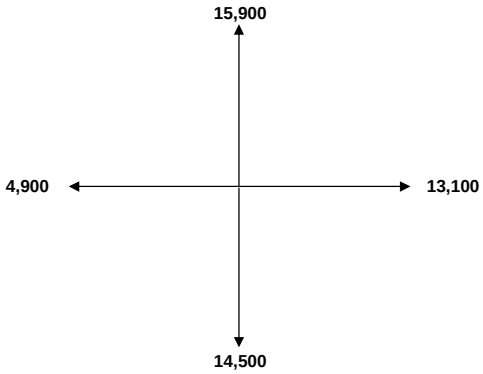
2016 Baseline Peak Hour Turning Movement Volumes (PM)



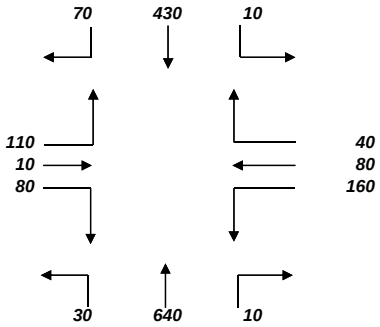
2016 Baseline ADTs



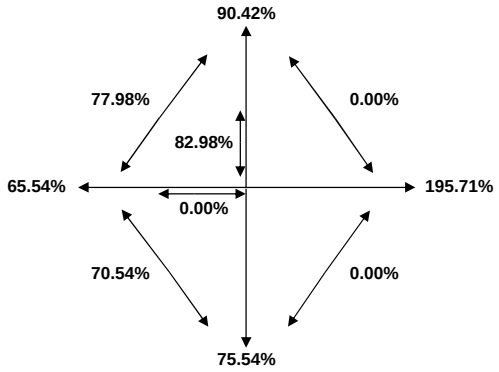
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

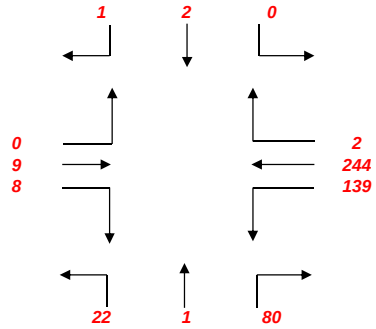


Build Conditions

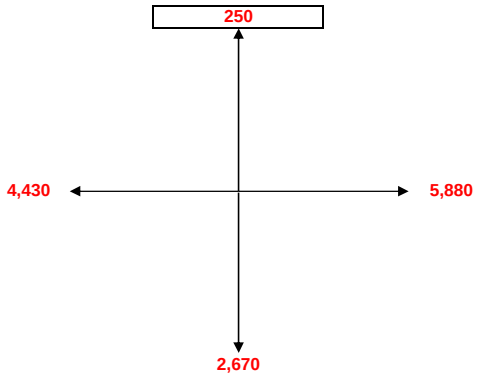
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

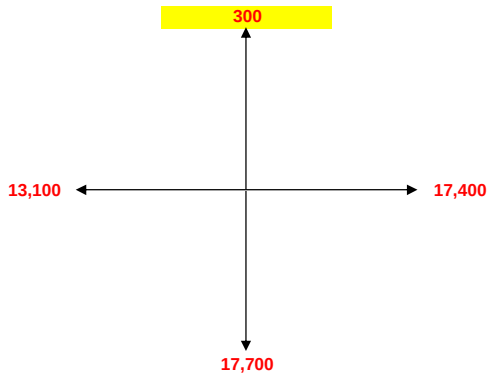
2016 Baseline Peak Hour Turning Movement Volumes (AM)



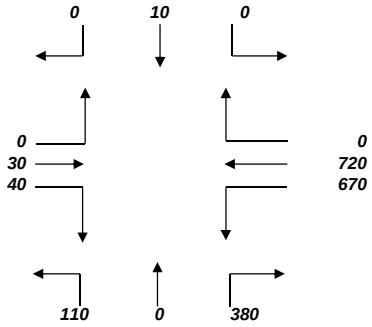
2016 Baseline ADTs



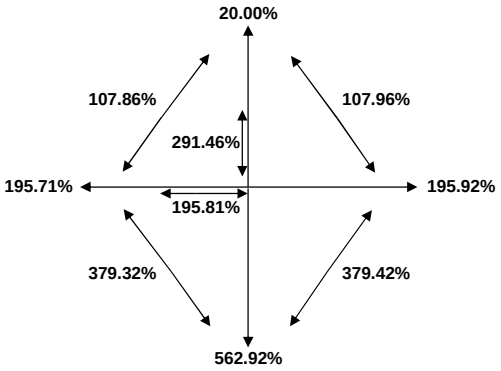
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

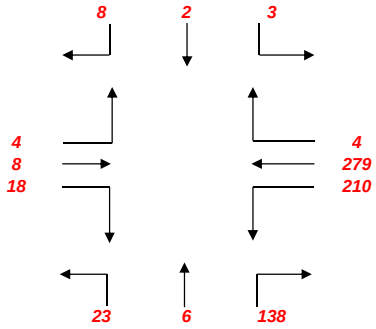


Build Conditions

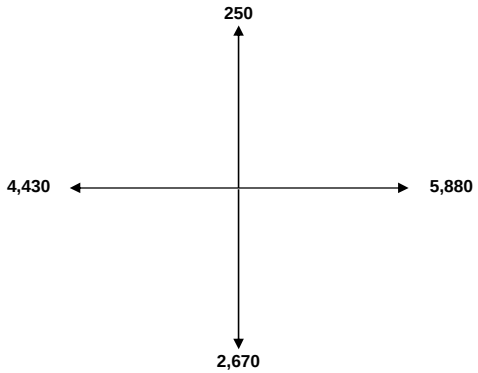
2035 Baseline Peak Hour Turning Movement Calculations

Olive Street and North Avenue

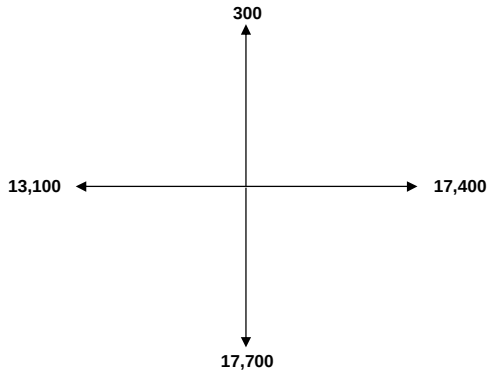
2016 Baseline Peak Hour Turning Movement Volumes (PM)



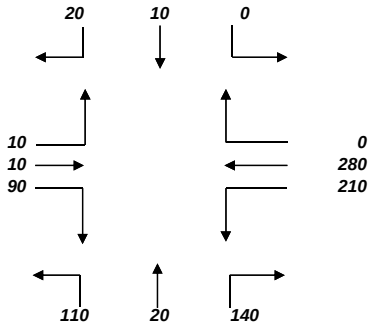
2016 Baseline ADTs



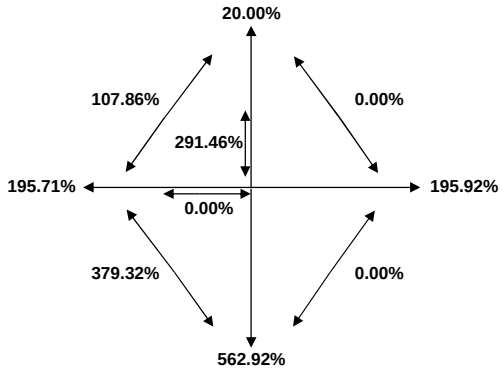
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

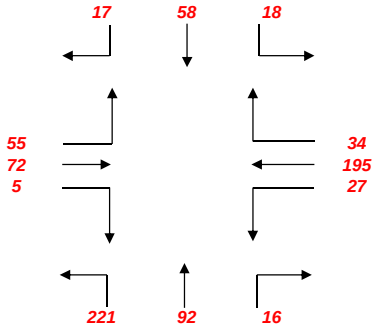


Build Conditions

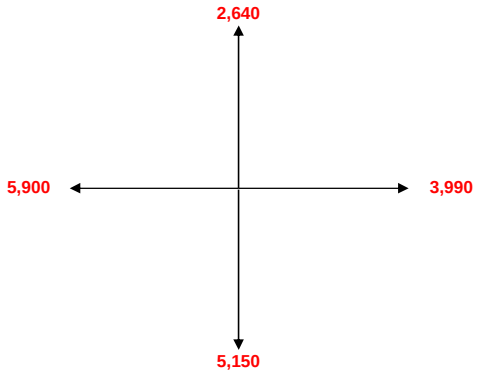
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

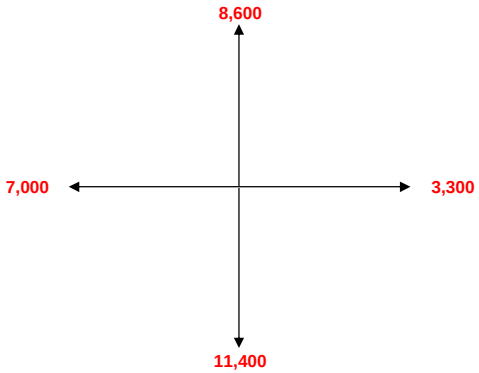
2016 Baseline Peak Hour Turning Movement Volumes (AM)



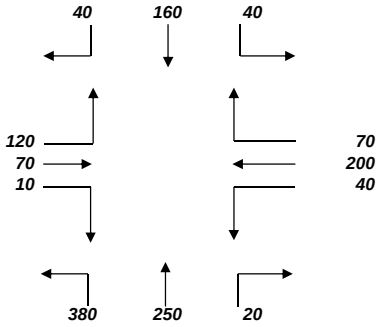
2016 Baseline ADTs



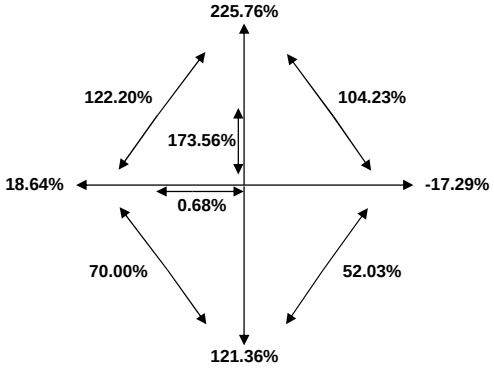
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

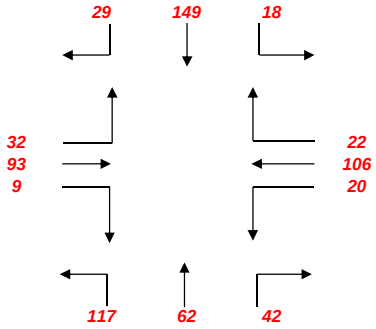


Build Conditions

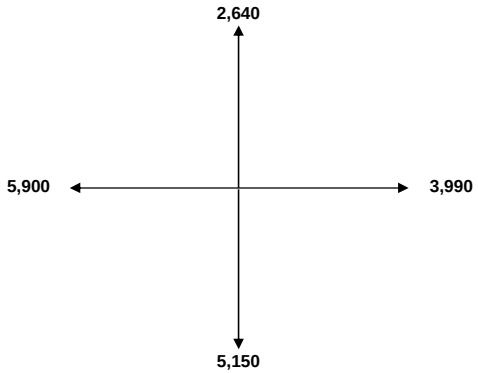
2035 Baseline Peak Hour Turning Movement Calculations

Grove Street and Lemon Grove Way

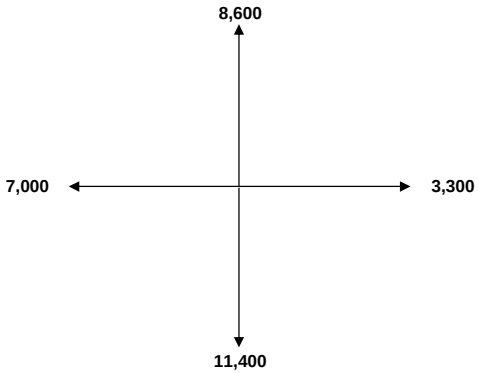
2016 Baseline Peak Hour Turning Movement Volumes (PM)



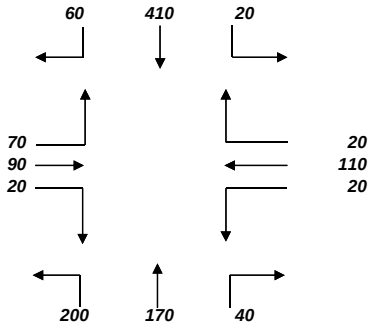
2016 Baseline ADTs



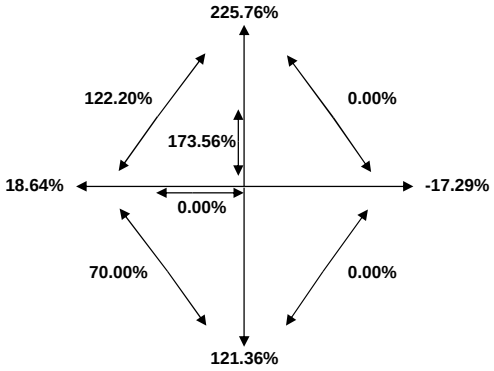
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

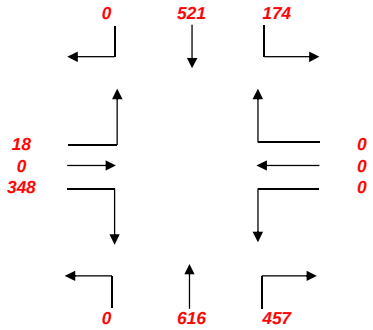


Build Conditions

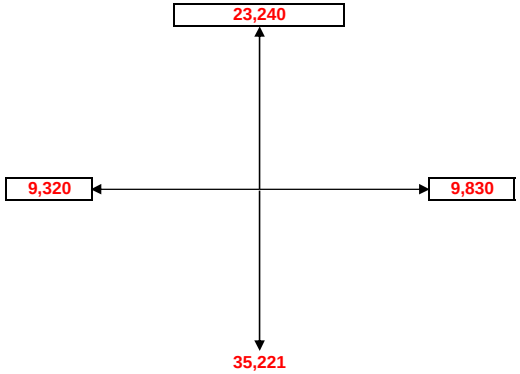
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

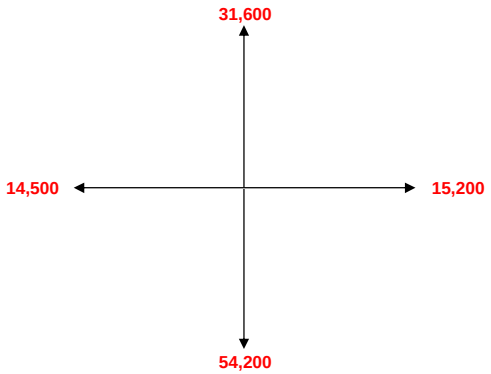
2016 Baseline Peak Hour Turning Movement Volumes (AM)



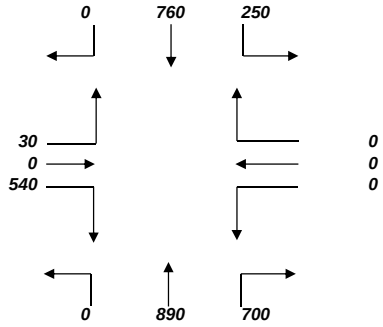
2016 Baseline ADTs



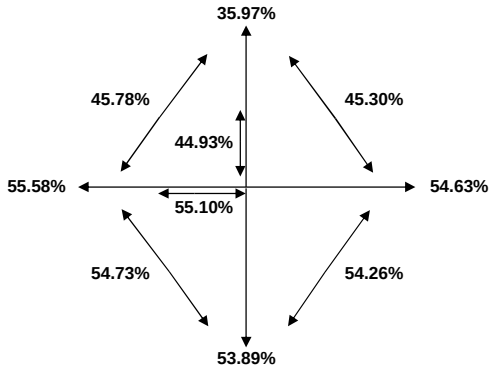
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

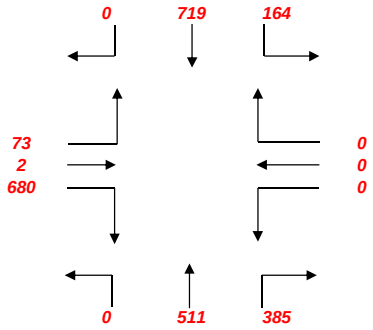


Build Conditions

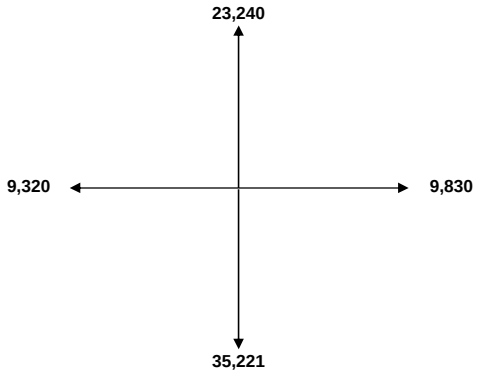
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and SR-94 Eastbound Ramps

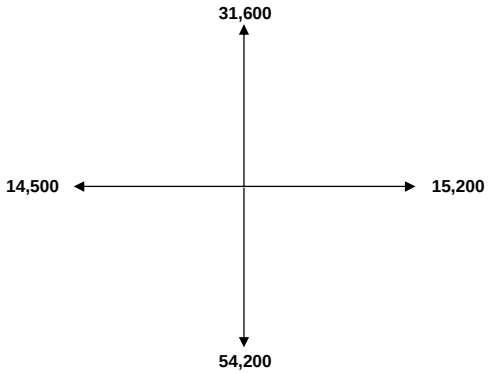
2016 Baseline Peak Hour Turning Movement Volumes (PM)



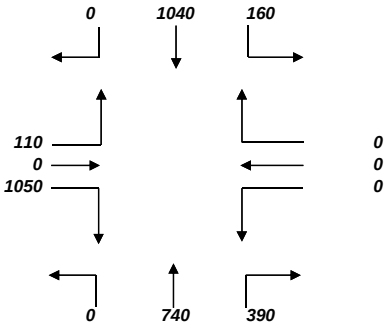
2016 Baseline ADTs



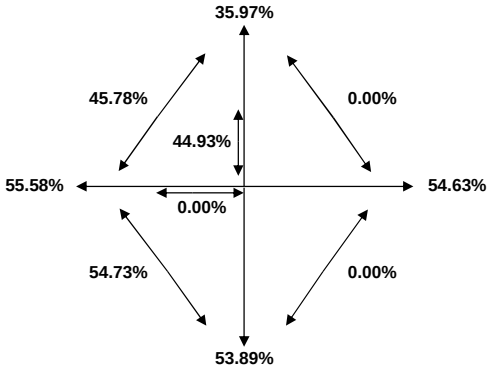
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

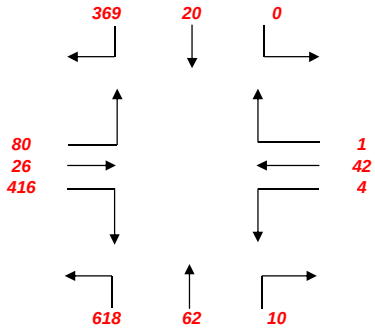


Build Conditions

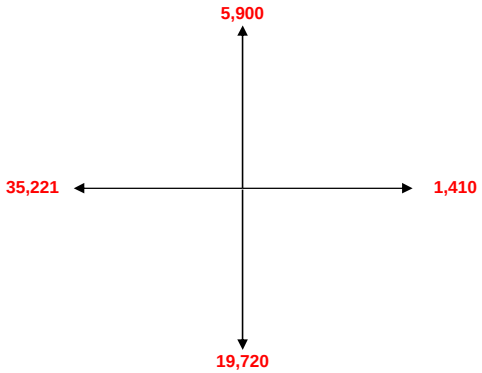
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove Way

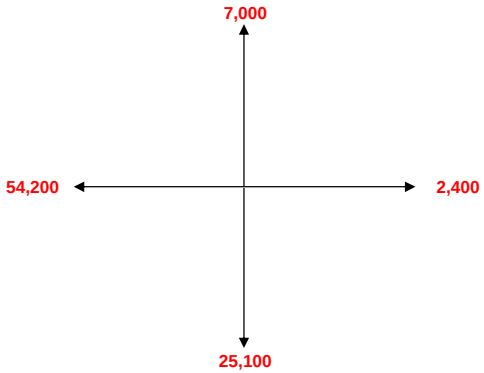
2016 Baseline Peak Hour Turning Movement Volumes (AM)



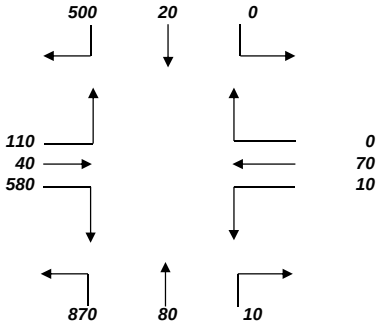
2016 Baseline ADTs



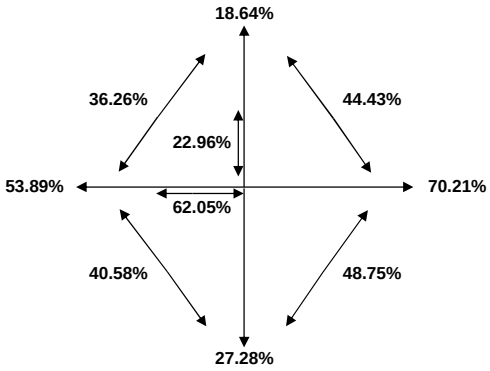
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

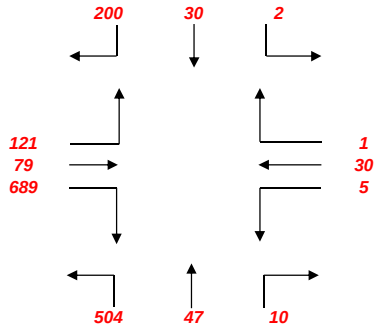


Build Conditions

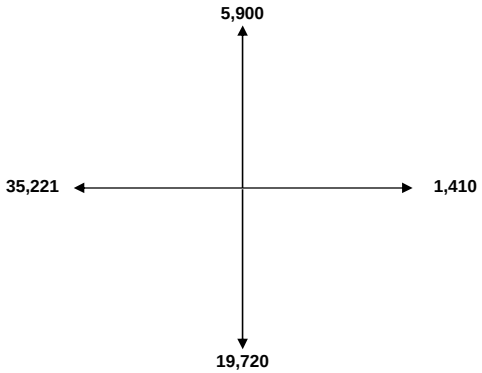
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and North Avenue and Lemon Grove W

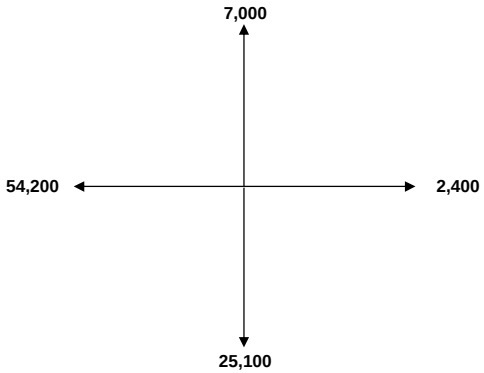
2016 Baseline Peak Hour Turning Movement Volumes (PM)



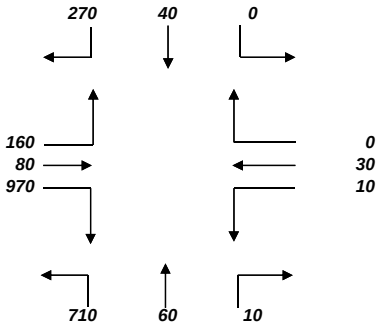
2016 Baseline ADTs



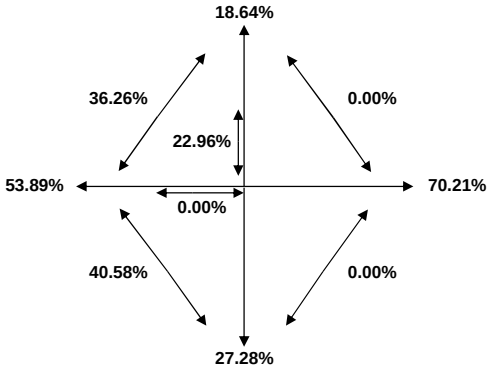
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

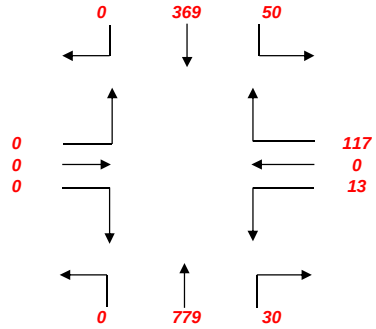


Build Conditions

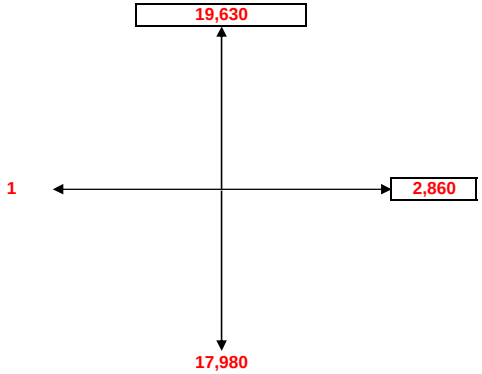
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

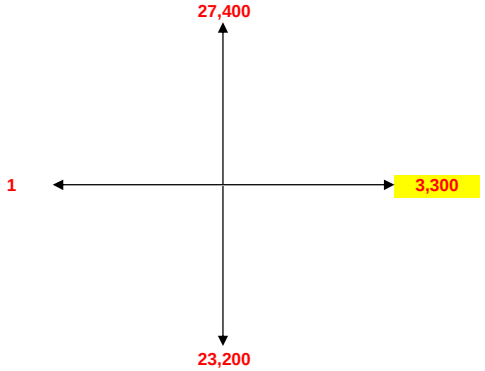
2016 Baseline Peak Hour Turning Movement Volumes (AM)



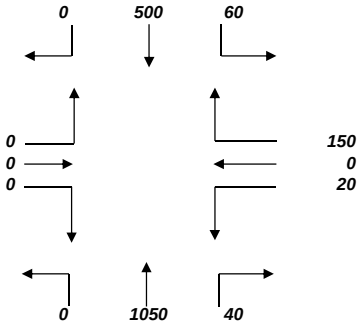
2016 Baseline ADTs



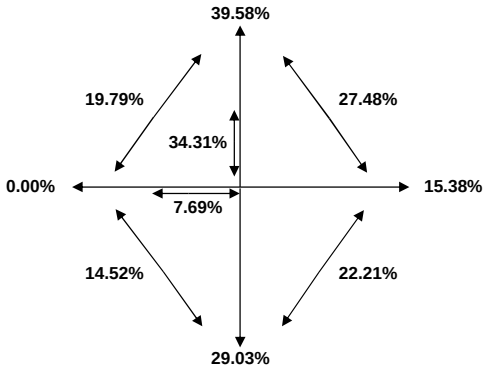
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

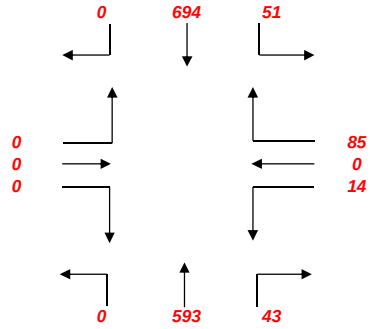


Build Conditions

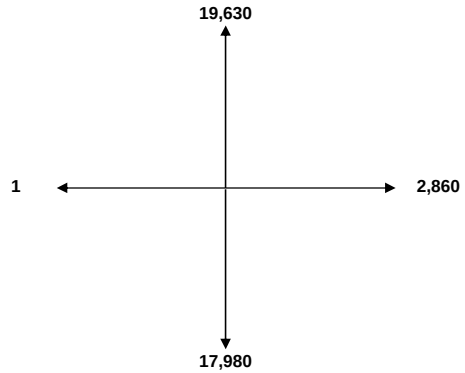
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Golden Avenue

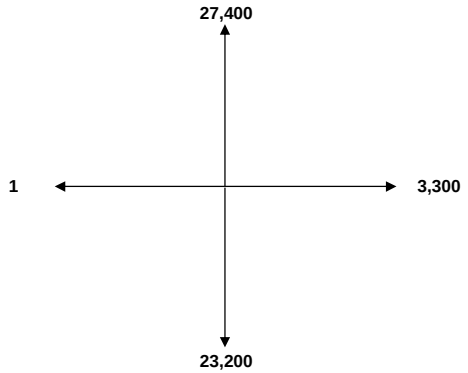
2016 Baseline Peak Hour Turning Movement Volumes (PM)



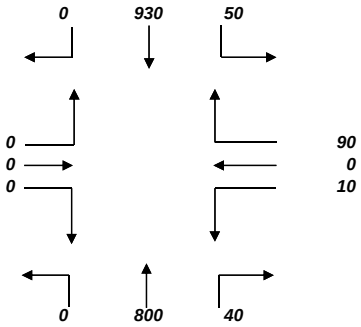
2016 Baseline ADTs



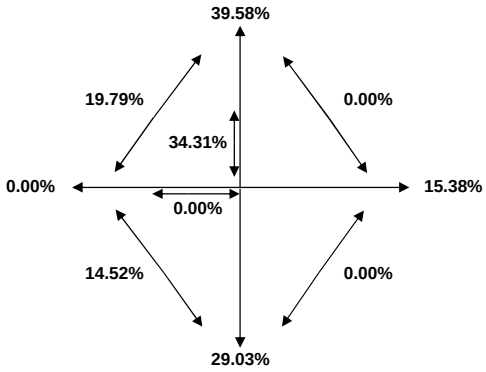
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

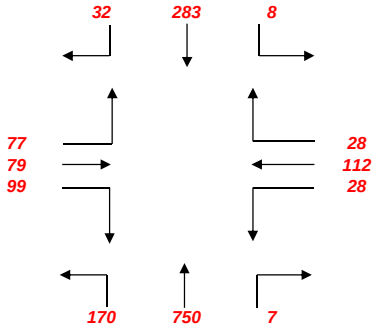


Build Conditions

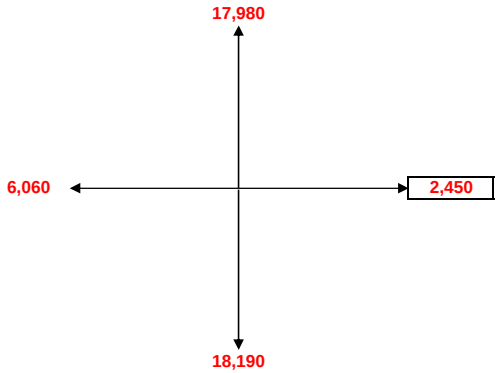
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

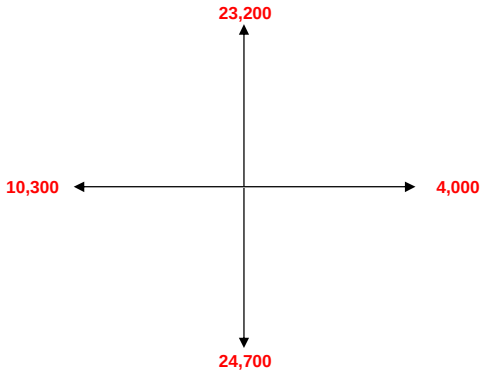
2016 Baseline Peak Hour Turning Movement Volumes (AM)



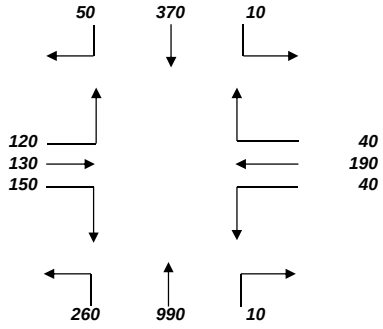
2016 Baseline ADTs



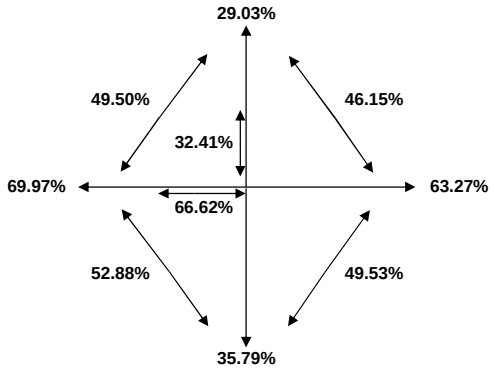
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

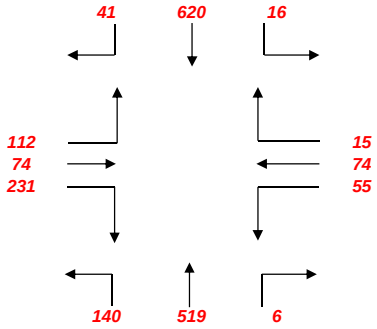


Build Conditions

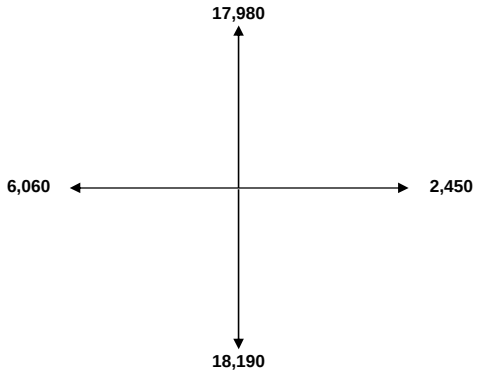
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Central Avenue

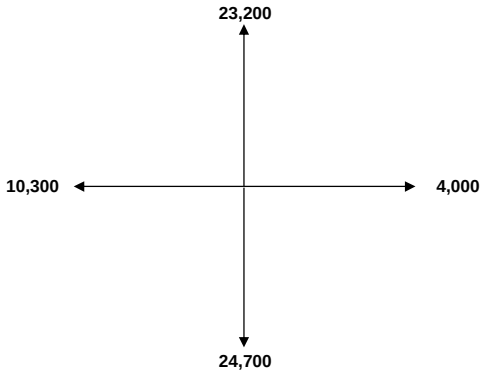
2016 Baseline Peak Hour Turning Movement Volumes (PM)



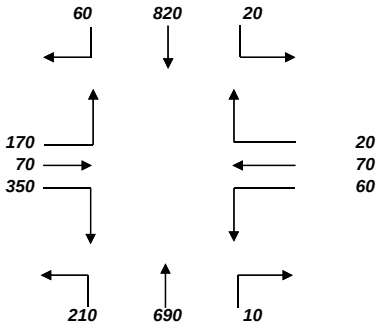
2016 Baseline ADTs



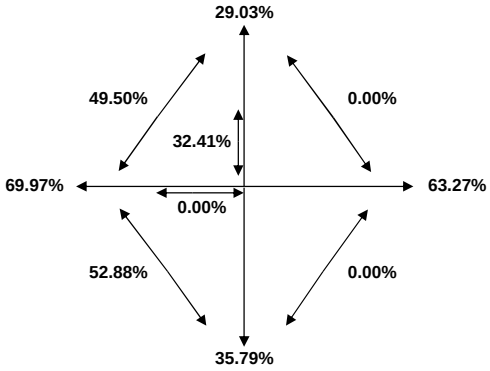
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

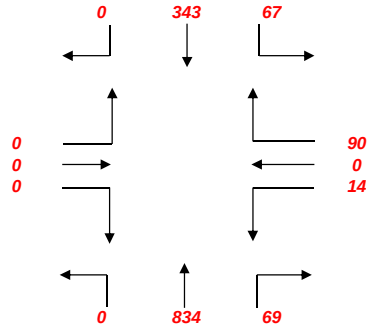


Build Conditions

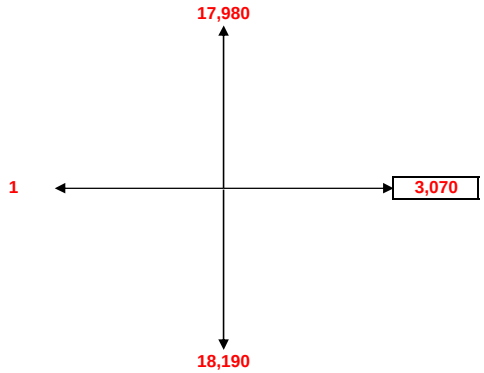
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

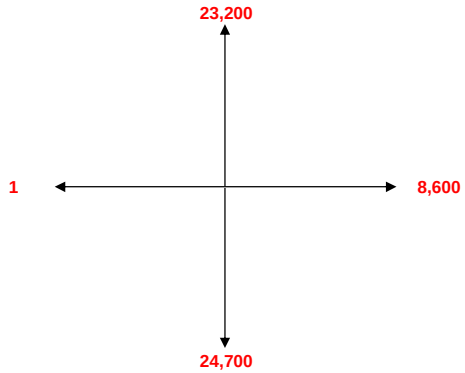
2016 Baseline Peak Hour Turning Movement Volumes (AM)



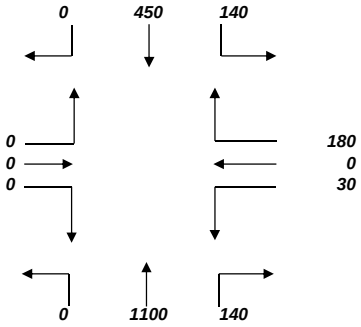
2016 Baseline ADTs



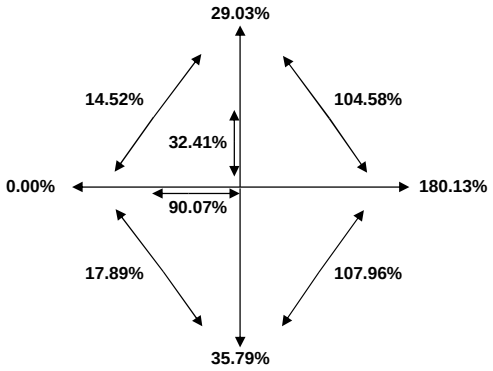
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

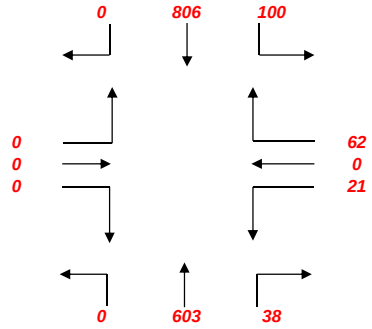


Build Conditions

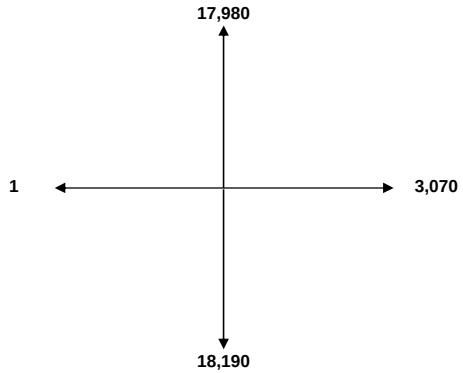
2035 Baseline Peak Hour Turning Movement Calculations

Lemon Grove Avenue and Lincoln Street

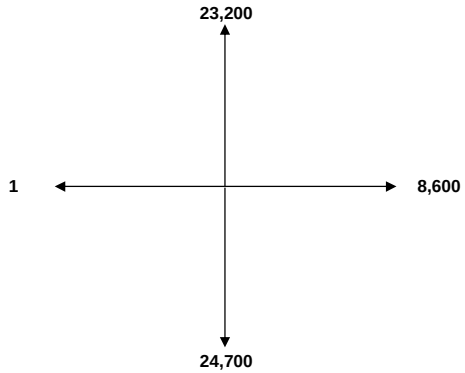
2016 Baseline Peak Hour Turning Movement Volumes (PM)



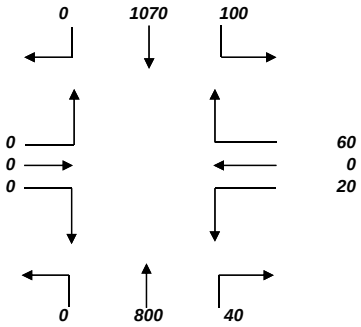
2016 Baseline ADTs



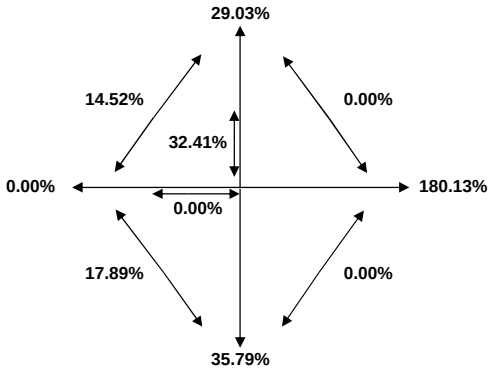
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

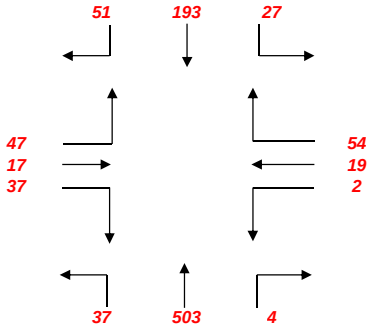


Build Conditions

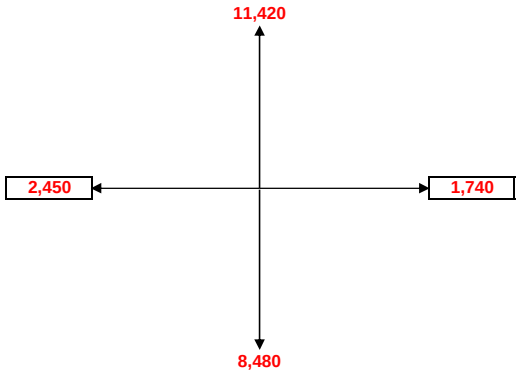
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

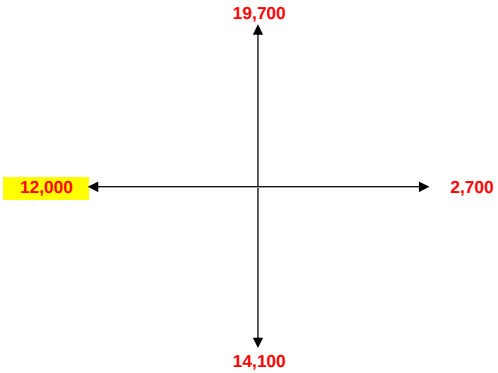
2016 Baseline Peak Hour Turning Movement Volumes (AM)



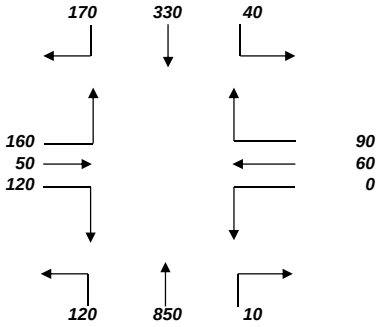
2016 Baseline ADTs



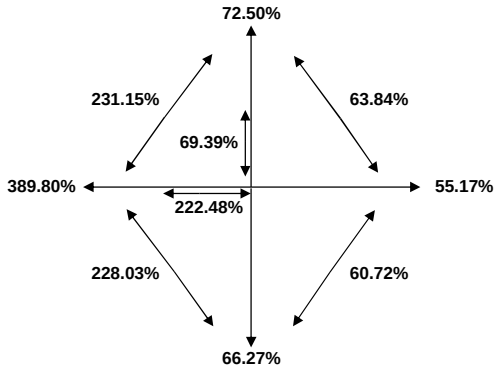
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

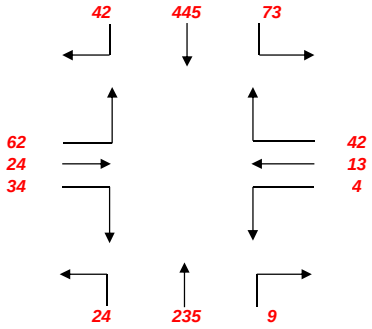


Build Conditions

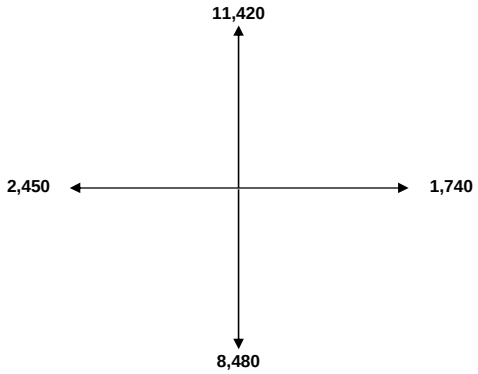
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Golden Avenue

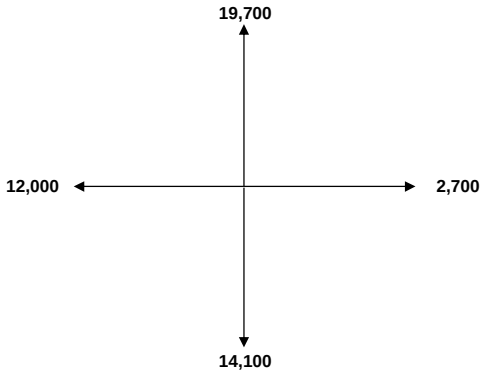
2016 Baseline Peak Hour Turning Movement Volumes (PM)



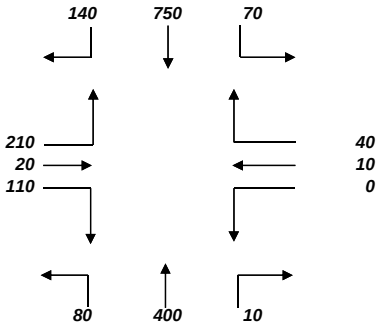
2016 Baseline ADTs



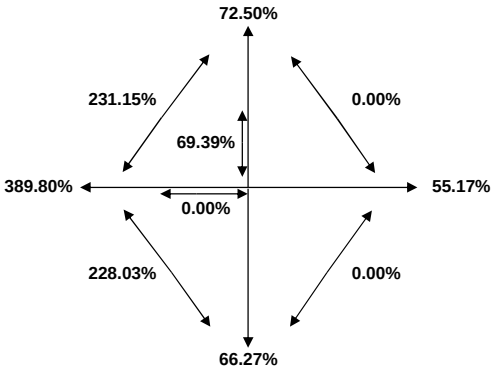
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

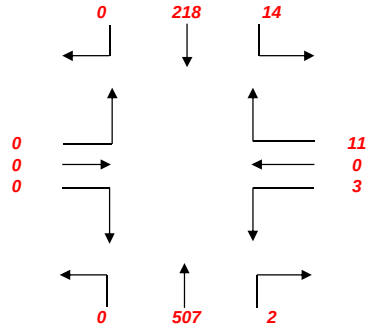


Build Conditions

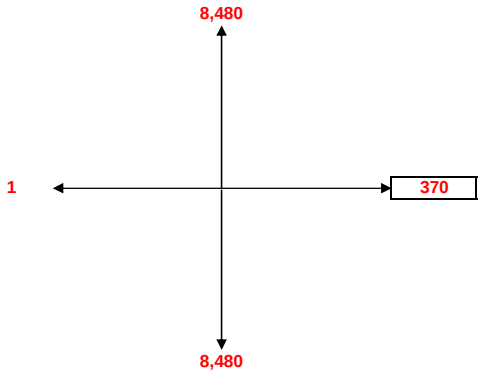
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

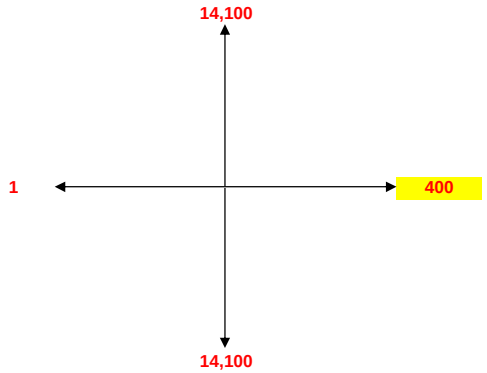
2016 Baseline Peak Hour Turning Movement Volumes (AM)



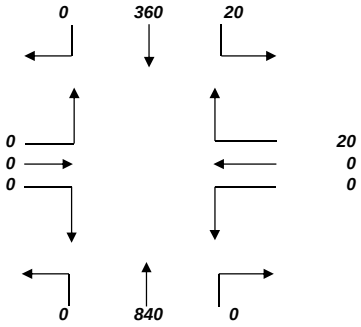
2016 Baseline ADTs



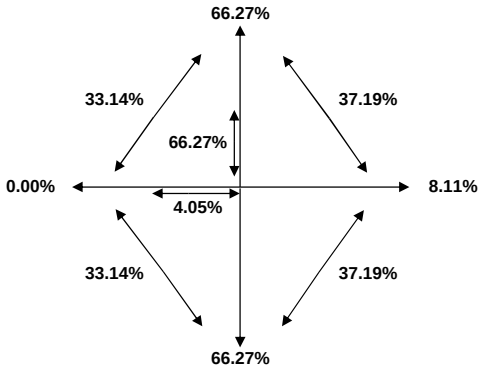
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

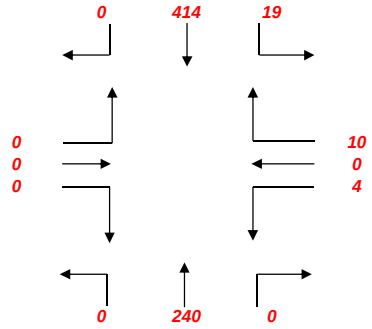


Build Conditions

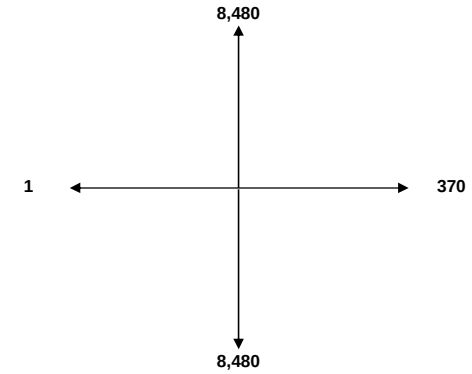
2035 Baseline Peak Hour Turning Movement Calculations

Kempf Street and Darryl Street

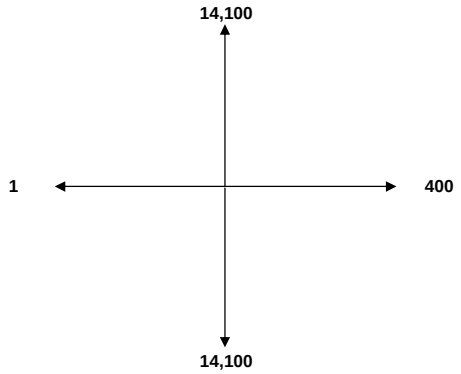
2016 Baseline Peak Hour Turning Movement Volumes (PM)



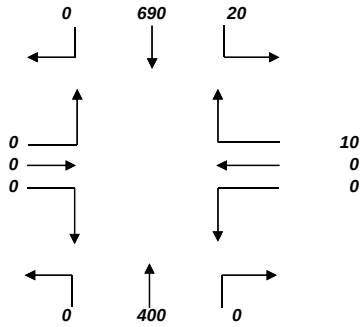
2016 Baseline ADTs



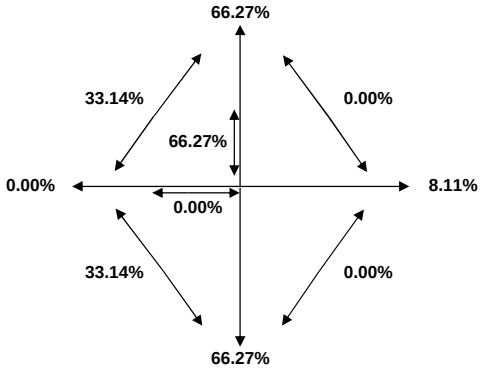
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

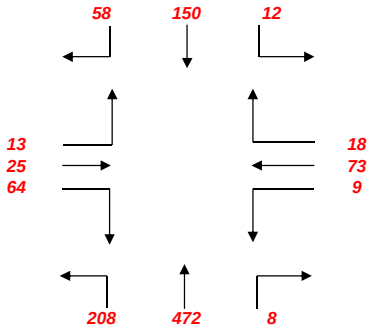


Build Conditions

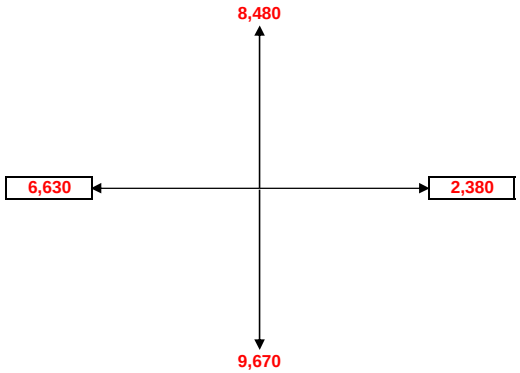
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

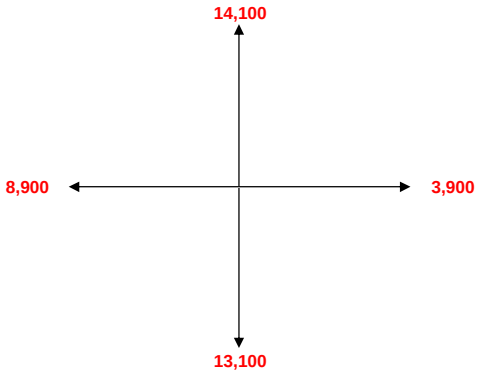
2016 Baseline Peak Hour Turning Movement Volumes (AM)



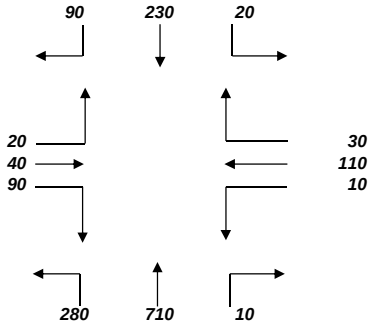
2016 Baseline ADTs



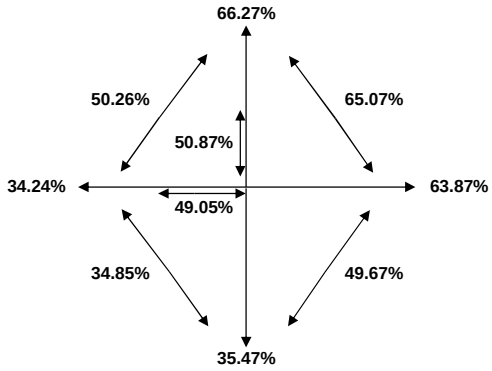
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

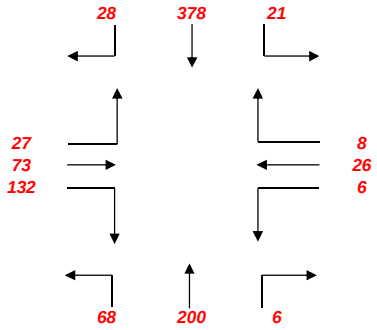


Build Conditions

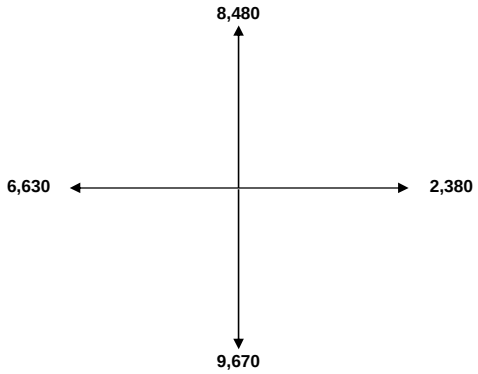
2035 Baseline Peak Hour Turning Movement Calculations

Skyline Drive/Kempf Street and Lincoln Street

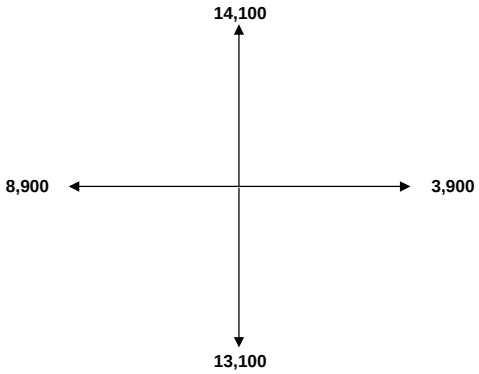
2016 Baseline Peak Hour Turning Movement Volumes (PM)



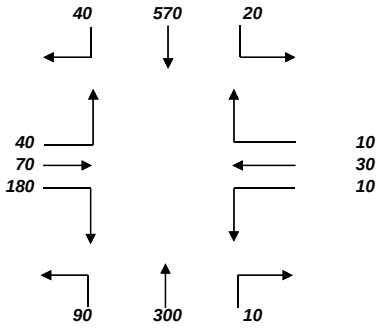
2016 Baseline ADTs



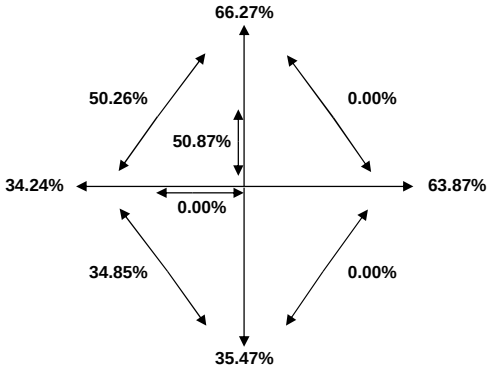
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

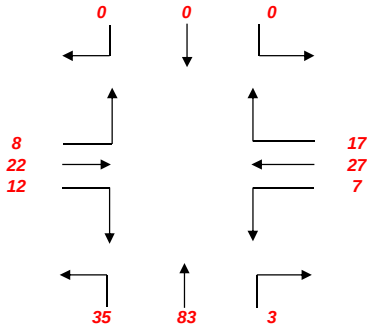


Build Conditions

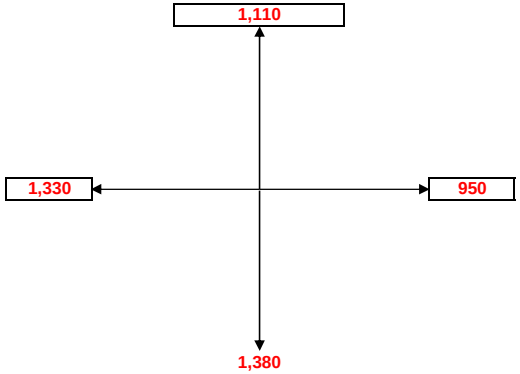
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

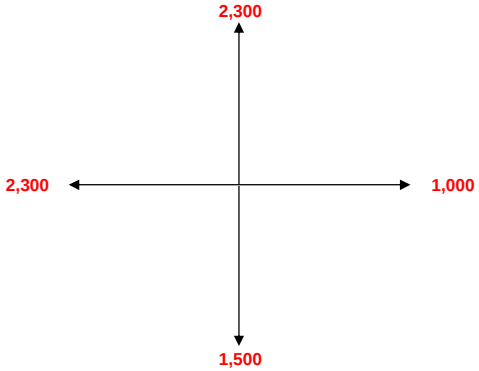
2016 Baseline Peak Hour Turning Movement Volumes (AM)



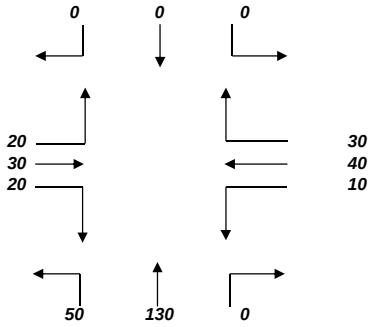
2016 Baseline ADTs



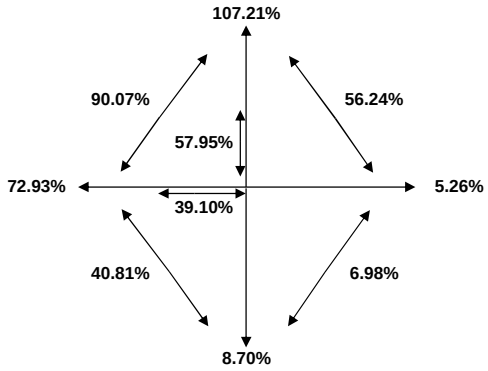
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (AM-Calculated)



percent increase/decrease

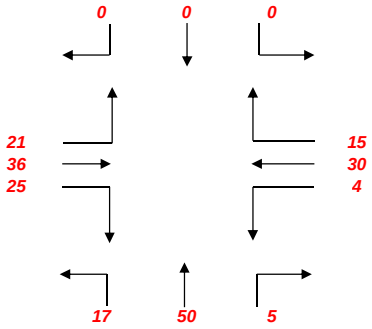


Build Conditions

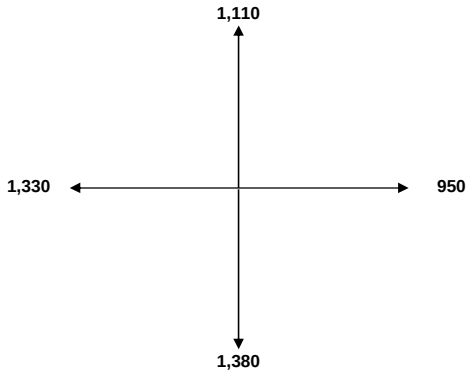
2035 Baseline Peak Hour Turning Movement Calculations

Washington Street and Golden Avenue

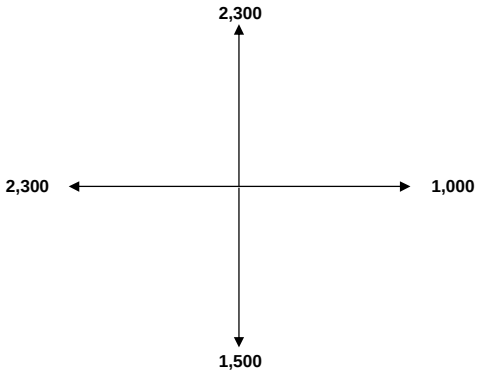
2016 Baseline Peak Hour Turning Movement Volumes (PM)



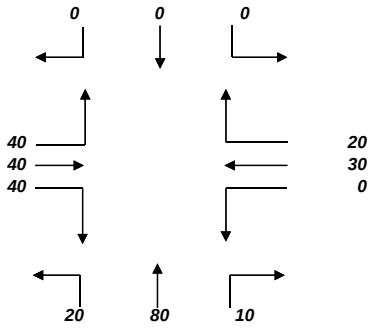
2016 Baseline ADTs



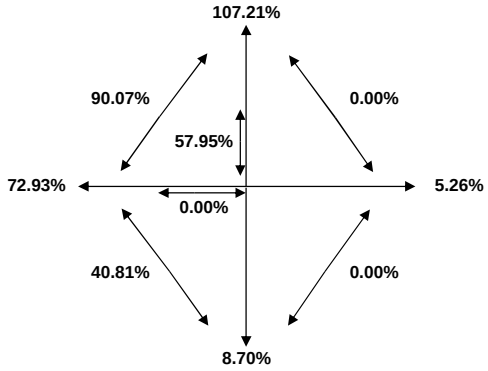
2035 Baseline ADTs



2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

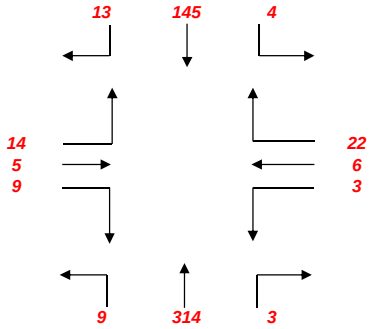


Build Conditions

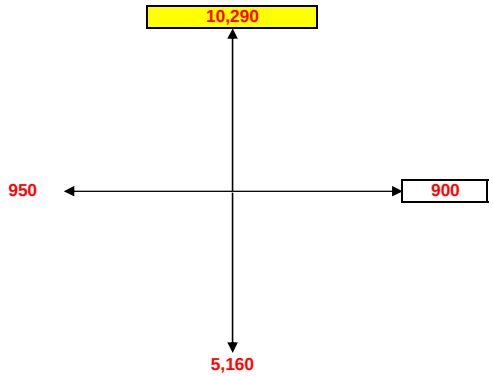
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

2016 Baseline Peak Hour Turning Movement Volumes (AM)



2016 Baseline ADTs



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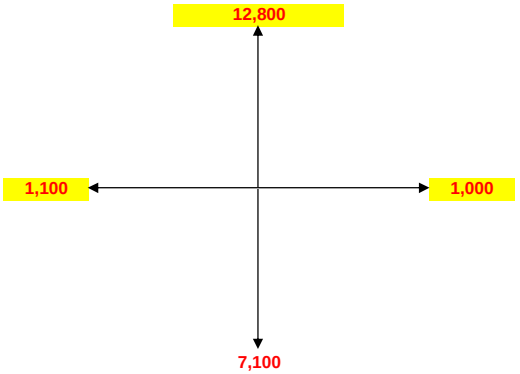

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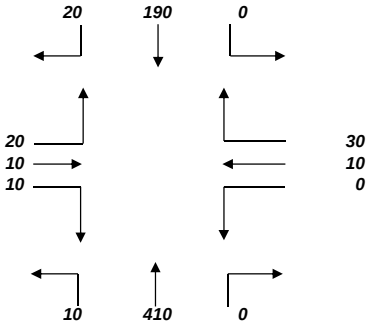
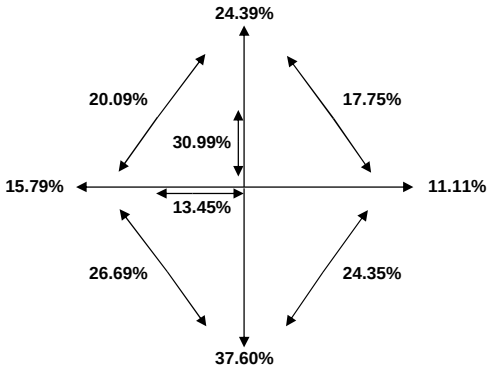


percent increase/decrease

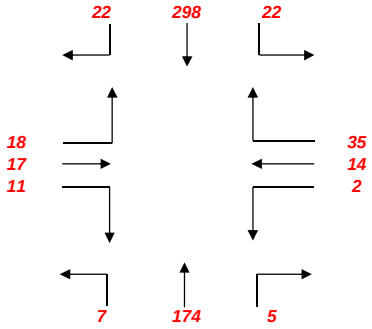


Build Conditions

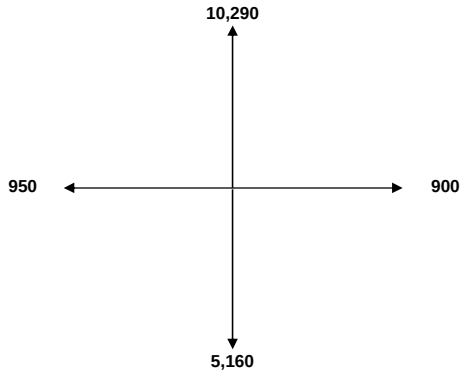
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Pacific Avenue

2016 Baseline Peak Hour Turning Movement Volumes (PM)



2016 Baseline ADTs



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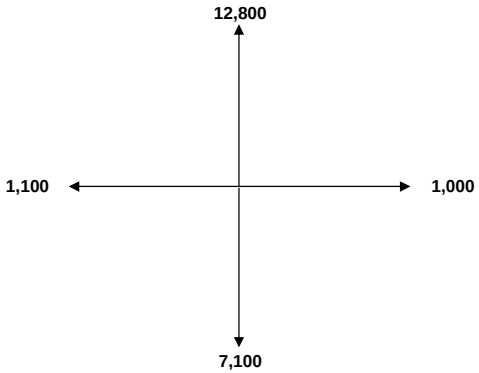

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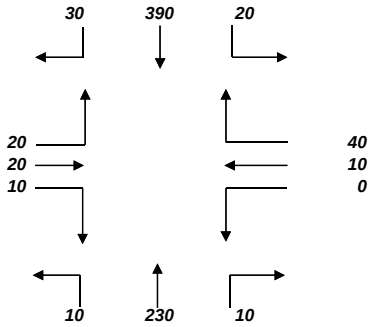
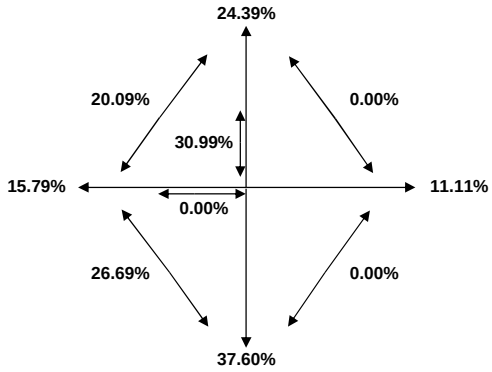


percent increase/decrease

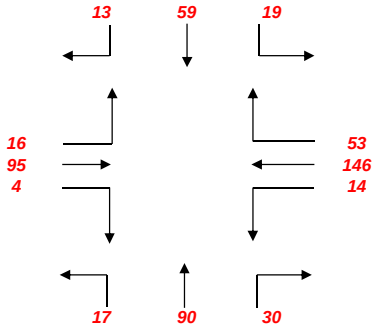


Build Conditions

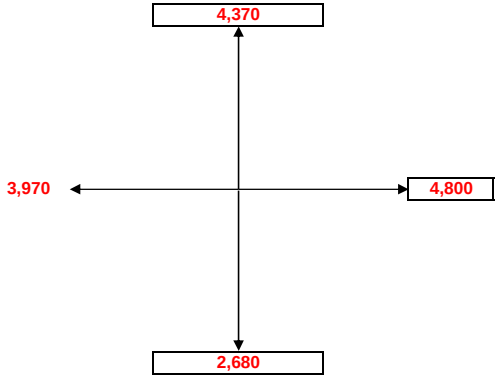
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

2016 Baseline Peak Hour Turning Movement Volumes (AM)



2016 Baseline ADTs



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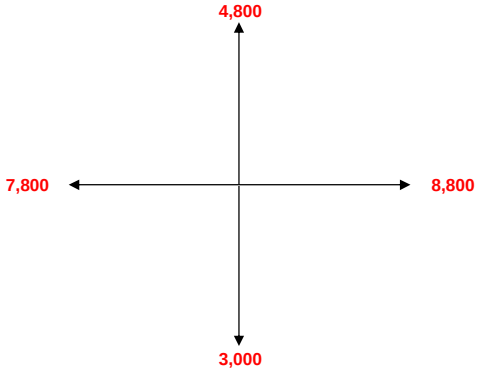

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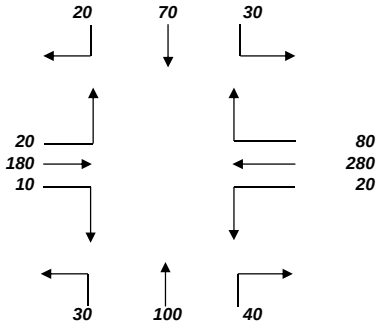
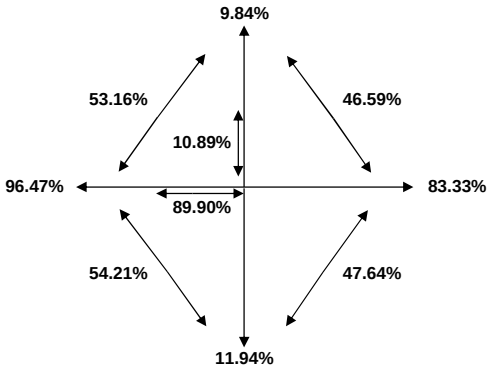


percent increase/decrease

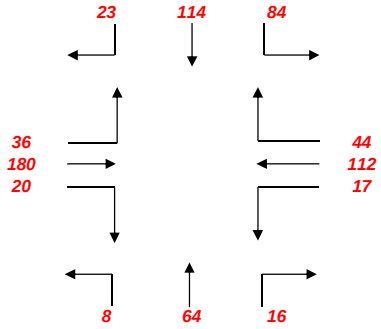


Build Conditions

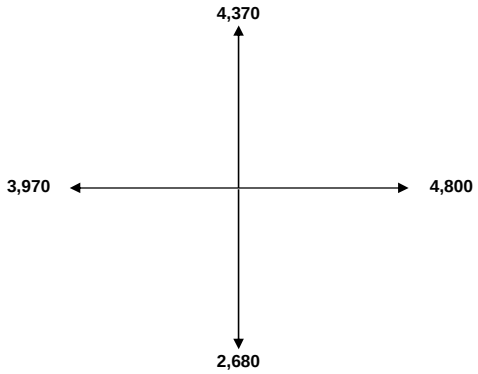
2035 Baseline Peak Hour Turning Movement Calculations

New Jersey Avenue and Central Avenue

2016 Baseline Peak Hour Turning Movement Volumes (PM)



2016 Baseline ADTs



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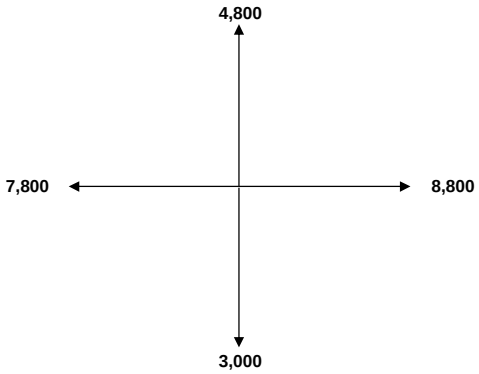
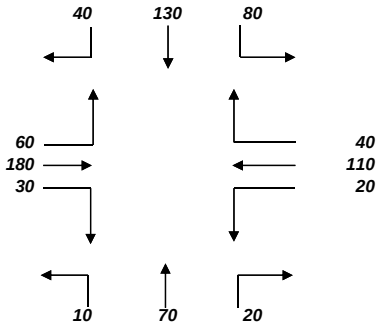
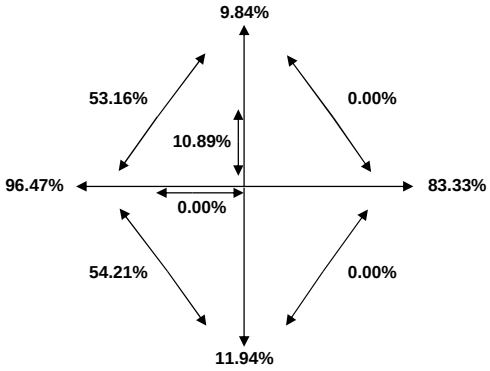


2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

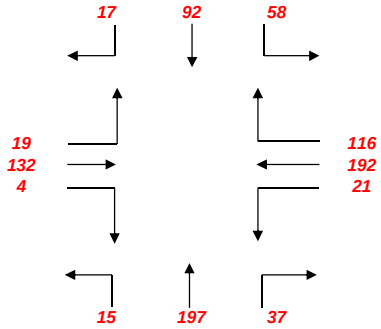


Build Conditions

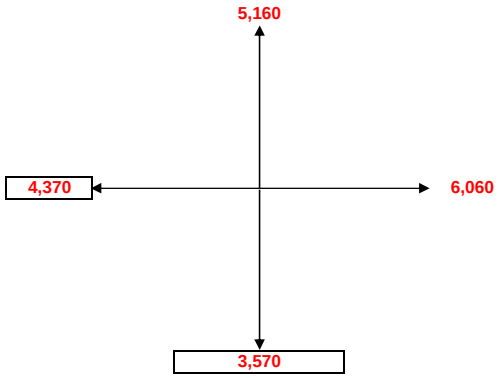
2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

2016 Baseline Peak Hour Turning Movement Volumes (AM)



2016 Baseline ADTs



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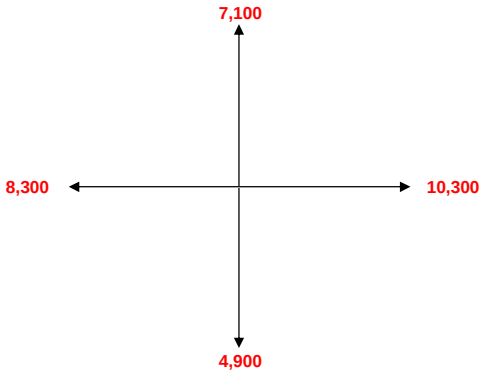

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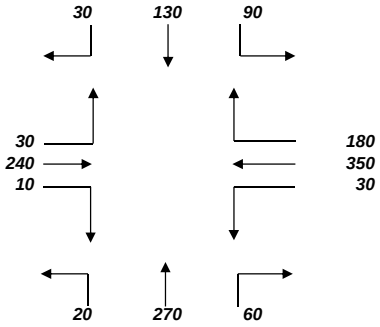
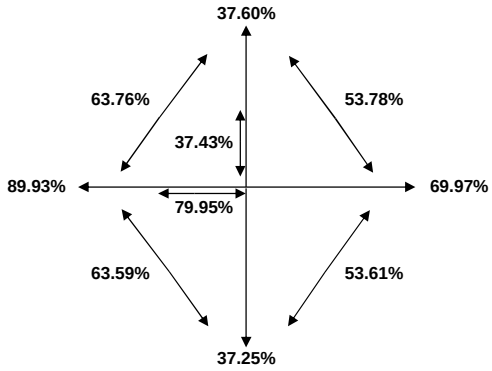


percent increase/decrease



Build Conditions

2035 Baseline Peak Hour Turning Movement Calculations

Buena Vista Avenue and Central Avenue

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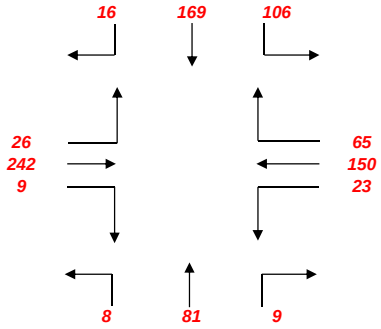

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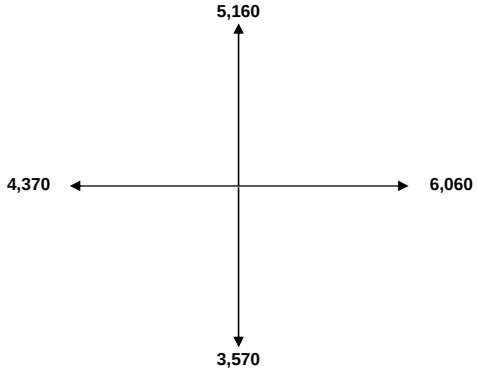

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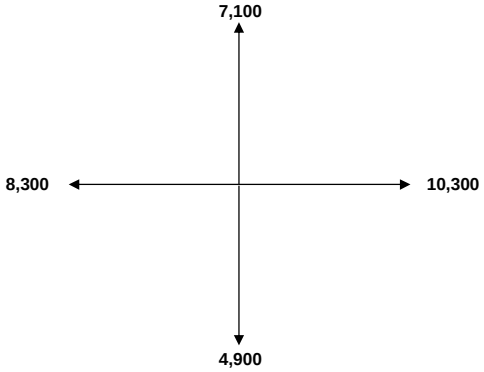
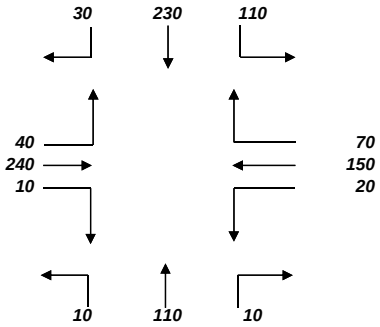
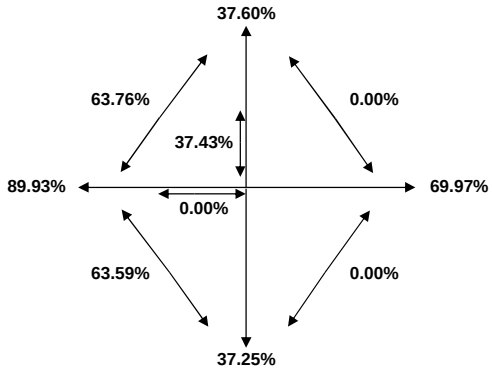


2035 Baseline Peak Hour Turning Movement Volumes (PM-Calculated)



percent increase/decrease

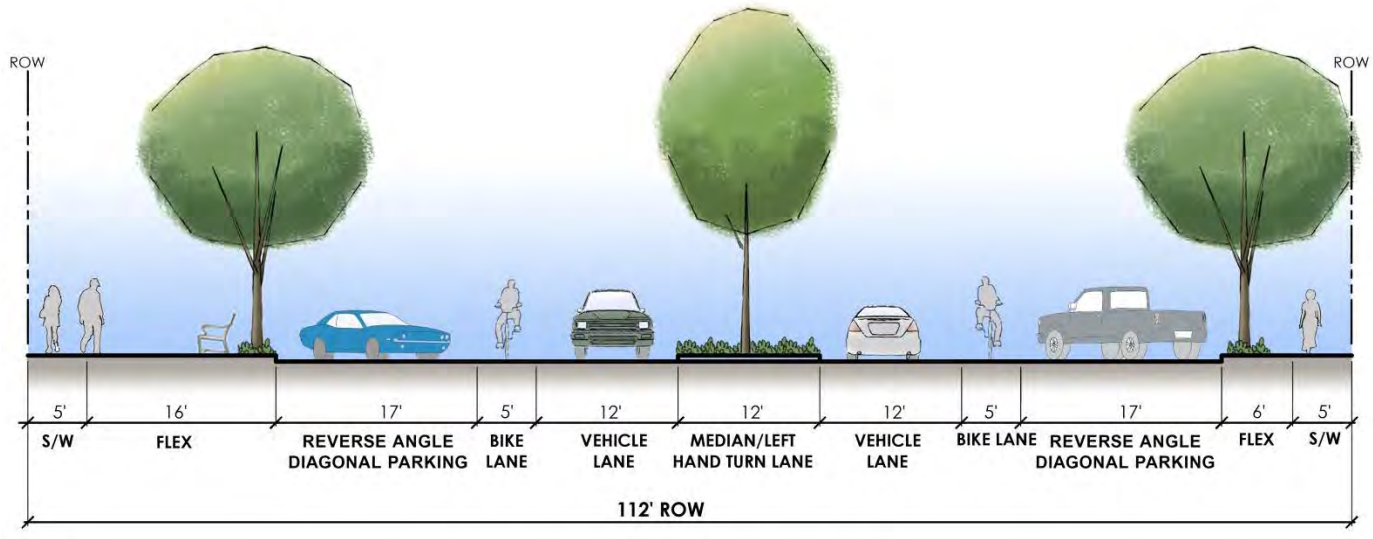


APPENDIX M

BROADWAY ROAD DIET CROSS SECTION

VILLAGE PROMENADE SPECIAL TREATMENT AREA: This two lane truck route and roadway includes Broadway east of Lemon Grove Avenue and west of Grove Street. The Village Promenade Special Study Treatment Area is illustrated on **Figure 5.2-3** and **Table 5.1** includes the streetscape standards. This roadway will function as the City's center by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

FIGURE 5.2-3 VILLAGE PROMENADE SPECIAL TREATMENT AREA CROSS SECTION



Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping.

Table 5.1
VILLAGE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

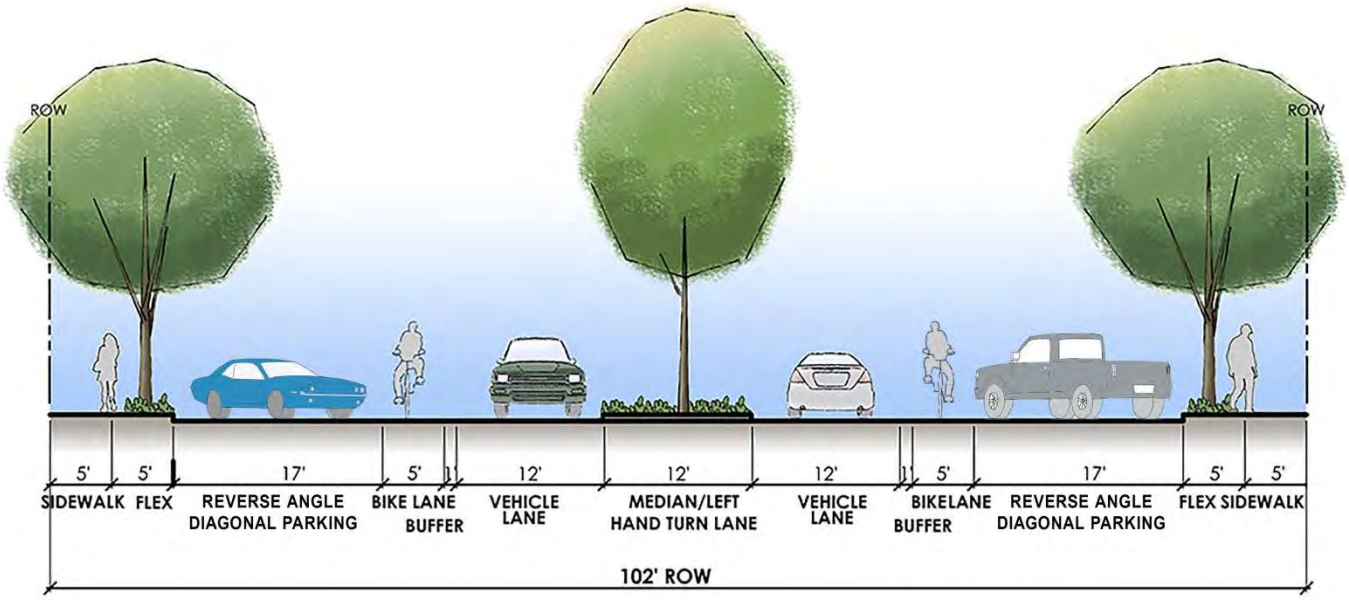
Number of Travel Lanes	One 12' Lane each side.
On-Street Parking	Yes, 30 degree reverse angle diagonal parking on both sides; Diagonal parking areas shall include shade tree islands as a part of the wheel stops encroaching into the parking zone. Bulb outs shall be included along parking edges and fire access areas with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Reverse angle diagonal parking shall be provided for bicycle safety.
Median/Left Hand Turn Lane	12'; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape and shade trees. Provide public art in the median.
Bike Facility	5' Class II bike lane. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways.
Sidewalk (S/W)	5'; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	16' north side and 6' south side; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 25'); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 100'); bicycle repair stations (1 per 500'); required utility infrastructure; retail, information and service kiosks, outdoor dining and cafes (including beer and wine sales in a fenced area); trash and recycle receptacles (1 of each per 100'); water drinking fountains and/or features (1 per 500'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 500'); shade structures; parklets, parkettes and paseos; and art and color, material, and

Table 5.1
VILLAGE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

	texture flatwork differentiation consistent with architectural styles within the zoning district. Allow for bicycle and skateboarding sharing facilities.
Street Trees	1 per 25 feet of frontage (See Table 5-10).
Street Lighting	1 per 25 feet of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part. Provide electrical outlets at the top and bottom of street lights and street lights across the street connecting streets during street closure events.
Other Required Improvements	The following improvements shall be required: signalized intersections (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Traffic calming shall be required at the transition for vehicles heading eastbound on Broadway past Lemon Grove Avenue. The centerline of the street shall be considered the center of the existing median. In-lieu fees for the fair-share contribution of all proposed street improvements within a block in accordance with an engineering estimate shall be provided based on the frontage of a property in relation to the full frontage width of the block face where frontage improvements are not feasible. Include bollards at each end to allow for street closures.

EAST BROADWAY SPECIAL TREATMENT AREA: This two lane truck route and roadway includes Broadway east of Grove Street and west of Washington Street. The East Broadway Special Study Treatment Area is illustrated on **Figure 5.2-4** and **Table 5.2** includes the streetscape standards. This roadway will function as a continuation of the City's "main street" by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

FIGURE 5.2-4 EAST BROADWAY PROMENADE SPECIAL TREATMENT AREA CROSS SECTION



Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping.

LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY

Item No. 5
Mtg. Date April 17, 2018
Dept. Development Services Department

Item Title: **Public Hearing to Consider Approval of the Downtown Specific Plan (General Plan Amendment GPA-180-0001) Authorizing a Comprehensive Amendment to the Downtown Village Specific Plan and Expansion of the Specific Plan Area (219 total acres)**

Staff Contact: David De Vries, Development Services Director
Michael Viglione, Assistant Planner

Recommendation:

1) Conduct the public hearing;
2) Introduce and conduct first reading of Ordinance No. 449 (**Attachment B**) approving General Plan Amendment GPA-180-0001 and certifying Mitigated Negative Declaration ND18-01.

Item Summary:

The Downtown Specific Plan (DSP) includes an expansion and update of the 2005 Downtown Village Specific Plan. The DSP will serve as a regulatory document that defines and regulates Downtown Lemon Grove's density, land use designation, development, design, circulation and growth. The DSP seeks to leverage development opportunities near the City's transit stations to energize downtown through economic development, place making and balanced circulation supported by a pedestrian oriented multi-modal circulation network to spur the growth and development required to realize a revitalized downtown. Mitigation Measures included in the environmental assessment will reduce potential impacts to below a level of significance. Comments received and staff responses will be provided to the City Council at the public hearing for consideration.

Fiscal Impact:

No fiscal impact. SANDAG's Smart Growth Incentive Program (SGIP) grant is funding the DSP.

Environmental Review:

☐ Not subject to review
☐ Negative Declaration
☐ Categorically Exempt
☒ Mitigated Negative Declaration

Public Information:

☐ None
☒ Notice to Stakeholders
☒ Notice to property owners within 500 ft.
☒ Notice published in local newspaper
☒ Community Workshops and Surveys

Attachments:

A. Staff Report
B. Ordinance No. 449 (GPA-180-0001)
C. Vicinity Map (Figure 1.2-4 of the DSP)
D. Exhibit “A”- DRAFT Downtown Specific Plan
E. Exhibit “B” - DRAFT Mitigated Negative Declaration ND18-01 with MMRP

Attachment A

LEMON GROVE CITY COUNCIL
STAFF REPORT

Item No. 5

Mtg. Date April 17, 2018

Item Title: **Public Hearing to Consider Approval of the Downtown Specific Plan (General Plan Amendment GPA-180-0001) Authorizing a Comprehensive Amendment to the Downtown Village Specific Plan and Expansion of the Specific Plan Area (219 total acres)**

Staff Contact: David De Vries, Development Services Director
Michael Viglione, Assistant Planner

Project Overview:

This item is a request to amend and comprehensively expand and update the City of Lemon Grove's 2005 Downtown Village Specific Plan. This update, called the Downtown Specific Plan (DSP), includes an expansion of the specific plan area within City limits from approximately Massachusetts Avenue to the west, Highway 94 to the north, Washington Street to the east and Lincoln Street to the south. The DSP will serve as a regulatory document that defines and regulates Downtown Lemon Grove's density, land use designation, development, design, circulation and growth. The Specific Plan expands Special Treatment Area (STA) 1 (Downtown Village) from 58 acres to 219 acres, expands STA V (Automotive Sales District) for the existing Honda Dealership due to the Realignment project and eliminates STA III (Regional Commercial) which removes emphasis on building "Big Box" style retail in the downtown. Both the 2005 Downtown Village Specific Plan and the 1992 Broadway Commercial Project Specific Plan which governs the Home Depot site will be rescinded as a result of the adoption of the DSP.

The DSP seeks to leverage development opportunities near the City's transit stations to support local businesses and energize downtown through economic development, place making and balanced circulation. An emphasis on housing will attract quality restaurants and retailers sought by the community. The DSP includes a variety of zoning districts which rely on Form Based Code, by-right land use permissions, and unique architectural design requirements to emphasize the character of existing downtown neighborhoods. Accommodations are also made for outdoor live music, events and activities. The DSP relies on increased densities and intensities supported by a pedestrian oriented multi-modal circulation network to spur the growth and development required to realize a revitalized downtown. Under the DSP, up to 3,000 new dwelling units and up to 143 new acres in floor area of commercial, industrial, hotel and office space are anticipated at build out. The Draft Mobility Element includes additional pedestrian and bicycle corridors and new street designations to limit the need to acquire additional right-of-way to install complete streets within the City. Street improvements include landscape, street trees, sidewalks, bulb outs, lighting, street furniture, trash receptacles and pedestrian and bicycle amenities. Several new street intersections are proposed to improve pedestrian safety and encourage multiple stop shopping with the added benefit of improved traffic flow. Gateway and Wayfinding locations and samples are included to assist with future cost estimates and grant funding for sign infrastructure. Developers will be required to pay for their fair share of street improvements and wayfinding and

gateway signage within the downtown and community facilities districts, and similar improvement districts are encouraged in the specific plan.

The preparation of the DSP was funded by SANDAG through a Smart Growth Incentive Planning Grant (SGIP) and the grant expires May 20, 2018. Consultants cannot be reimbursed for costs incurred after this date. The community outreach is complete for the DSP and staff received direction from the City Council for the preparation of the draft DSP. The draft DSP preparation was coordinated by the City Planning Division and our contract consultant's Rick Engineering Company, Urban Design & Planning Division. An environmental assessment was conducted, and Mitigation Measures included in the environmental assessment will reduce potential impacts to below a level of significance. Specific Council Policy related to the vested rights of those planning applications that are not fully entitled must be adopted during DSP implementation to address any outstanding questions.

Background:

The Existing Plan (DVSP)

The Downtown Village Specific Plan (DVSP) was adopted by the Lemon Grove City Council in 2005. The goal of the DVSP is to implement the 1996 General Plan's vision for the Downtown Village: to create a lively mix of retail, offices, condominiums and apartments supported by a variety of transportation options. A few of these key projects, which resulted from the DVSP, include the Main Street Promenade Park, a linear park themed 'Yesterday, Today and Tomorrow;' Citronica I, a five story/56-unit affordable housing complex with 3,650 square feet of retail space fronting North Avenue; Citronica II, a five story/80-unit affordable senior housing complex; and Celsius, the newest addition to the Main Street Promenade area, which is a four story/84-unit market rate complex.

SANDAG Smart Growth Incentive Program Grant Award and Expanded Study Area

In 2006, SANDAG accepted the first Smart Growth Concept Map (SGCM) to illustrate the location of existing, planned and potential smart growth areas in the County. SANDAG initially adopted two smart growth sites in Lemon Grove: the Lemon Grove Depot Trolley Station at Broadway and Main Street (LG-1 Town Center), and the Massachusetts Trolley Station at Lemon Grove Avenue and Massachusetts Avenue (LG-3 Community Center). During the SGCM's update process, the City Council consented to expanding the smart growth area to allow for continued success of Transit Oriented Development (TOD). As such, SANDAG has identified the expanded area (254 acres) inclusive of the existing DVSP area as a Smart Growth Opportunity Area (LG-2 Town Center). This designation places the City in a position to acquire capital infrastructure grants in the future and to become a regional hotspot for smart growth and TOD. In 2015, the City Council expressed interest in exploring new opportunities for the downtown and as such, they authorized the submittal of a grant application for an expansion to the DVSP consistent with SANDAG's updated SGCM. The City was later awarded the grant, and the City Council contracted with Rick Engineering to prepare the DSP. Brian Mooney is the principal-in-charge at Rick Engineering and he also prepared the original DVSP.

As a result of the Baseline Opportunities and Constraints Report and community workshops, it was determined that the areas surrounding and east of Acacia Street, the area south of Pacific Avenue and west of Olive Street, and the area north of Golden Avenue and east of Kempf Street did not warrant consideration for inclusion of the expanded DSP area in order to maintain a lower density transition zone into the downtown. The area north of Broadway, between St. John of the

Cross and Sparkle Self-Service Car Wash was added to the DSP area due to its redevelopment potential as an extension of the downtown shopping corridor.

Background Report

A Baseline Opportunities and Constraints (Background) Report was prepared before development of the DSP and explored seven key planning topics. The report established an inventory of existing conditions and provided a foundation for the vibrant Downtown Village vision articulated in the DSP. Important findings include:

- Land Use: Existing land use patterns within the DVSPE area pose a number of constraints preventing the City from achieving full development potential within the study area. These constraints include: a predominance of small parcel sizes; the limited number of parcels within the DVSP Expansion Area that the City owns; and an abundance of established land uses (already developed) increasing costs of acquisition and redevelopment.

  Benefits of the City's downtown include its central location, the presence of a Trolley station, a walkable geographic area, and many underutilized or vacant parcels. Through the addition of more market rate housing and employment centers bringing families and professionals into the DVSPE area, the City can attract more entertainment oriented land uses and high quality retailers (e.g., movie theatres, sit-down restaurants, breweries, etc.). The most critical opportunities include reducing development costs through low fees, short development review and entitlement timelines, and minimized City requirements and expanded development opportunities through zoning allowances for five story mixed uses and allowances for entertainment and employment oriented land uses and high quality retailers.

- Visual Character: Many areas in Downtown Lemon Grove lack visual interest, are not pedestrian friendly and/or are not well maintained. Opportunities to enhance the visual character of the area to attract development, residents and visitors exist and include enhancements to architecture, landscape, street furniture, lighting, public art, façade improvements, "green-street" designs and signage.

- Mobility: The State Route 94 and the Trolley tracks pose a natural barrier that causes traffic and reduces pedestrian mobility. Existing traffic conditions on the east side of the trolley tracks operate at high service levels and would accommodate additional growth and density.

- Infrastructure: Water service, wastewater service, stormwater and drainage service and utilities are all sufficient to accommodate future growth. Three wastewater pipelines will require monitoring in order to assure adequate service is provided for future population growth. There are six locations within the DVSPE area that are experiencing drainage deficiencies and should be monitored and/or improved if these deficiencies continue or are exacerbated. Recent findings show that water pressure for fire suppression systems to service the downtown will require assistance from pump (booster) systems either at each individual development or from service mains.

- Public Safety: Current County of San Diego Sheriff's and Heartland Fire and Rescue Department staffing levels are adequate to meet response time standards for the City, though the local Departments will likely be strained by an increase in population and development. Additional staffing and equipment may be necessary to meet the service call demands associated with these increases. Heartland Fire and Rescue has achieved an Insurance Service Organization (ISO) 1 classification, the highest level achievable.

- Environmental Issues: The downtown area is highly urbanized and previously disturbed by human activity with little to no constraints towards development. Known historic/cultural resources within the area are limited to seven historic sites.
- Market and Economic Analysis: Market rate housing is a critical driver in attracting desirable land uses for Lemon Grove contributing to local spending for retail, dining and services. Based on permit records within the DVSP over the last 12 years, only areas that were rezoned to five stories or more received interest that resulted in redevelopment. For the areas only allowing three story building heights, no development occurred. Residential housing development within the DSP area would serve to support an expansion of the commercial/office space development opportunities within the City.

  A critical element to the City's sustainability and economic viability is addressing the jobs-housing balance. There are few employment industries in the City and additional hubs are needed for Lemon Grove to be consistent with regional averages. There is limited opportunity for high quality office development in the near term, so the City should focus on attracting professional office users. In the long term, providing a community identity (a sense of place), well maintained infrastructure and creating a regional destination will help attract family oriented businesses and entertainment uses and professional offices and hotels.

Public Outreach Summary

The City Council approved a Public Outreach Program for the DSP that satisfied statutory requirements and provided opportunities for meaningful public input on the Specific Plan. The Public Outreach Program included: noticing and marketing; media advisories; community group meetings; pop-up events; surveys; door-to-door canvassing; project website; email blasts; property owner notifications, two community workshops and one City Council public workshop. Bilingual project flyers were created and distributed in community places of interest and posted in City all facilities.

Surveys to business owners cited competitive rents or property values and convenient freeway access as the major attractors of conducting business Downtown. The major challenges that were cited include unappealing physical building aesthetics and a perceived lack of maintenance and cleanliness throughout the area as a whole. Another challenge to conducting business in the area is the perception of high crime. Business owners expressed belief that streetscape improvements, façade improvements, and wayfinding signage will improve their business opportunities.

Results of the general surveys indicate that the majority of residents visit Downtown at least once a week. Primary reasons for doing so include activities, such as dining out, shopping, and visiting the post office. However, a majority of residents do feel that Downtown is not family-friendly and would like to see more food and drink venues, entertainment venues and shops. Residents cited that shopping choices were limited and that they would like to see a greater variety of retail sales and services. Respondents indicated that they were open to the formation of themed districts, such as an Arts District and Historic District. Deterrents to visiting the Downtown area include lack of maintenance, perception of crime, a lack of parking, and vagrancy.

Workshop attendees were open to two to five story buildings in the Downtown, but also wanted to retain the City's small town feel. The cleanliness and perception/presence of homeless/transients, crime and criminal activity was the largest deterrent to community members spending more time Downtown. There was a lot of animosity towards new affordable housing developments, reductions in parking and potentially increasing traffic. More family oriented and business professional type businesses were highly desired (e.g., restaurants, breweries, brewpubs, movie theatres, etc.) and they understood the need for market rate housing in order to

attract additional retailers. Generally, attendees were open to office and hotel type uses. Having a larger mix of businesses was also desired. Allowing for art and providing an art and historic districts were generally well supported. Attendees requested safe walking and biking connections between destinations within the Downtown corridor and ranked pedestrian access as a high priority. Additional park and parkette areas were desired. Respondents were very supportive of concepts like a Broadway road diet and plaza space and creating opportunities for outdoor live performances and increasing outdoor activities. The complete workshop and survey summaries are available online (www.tinyurl.com/dvspe).

At the City Council Public Workshop, the City Council directed staff to proceed with a draft specific plan. The Council acknowledged the community concerns and desires and was receptive to Staff's revised alternatives and goals, objectives and policies which helped to preserve the City's "small town" charm, create unique neighborhoods and promote redevelopment around the trolley station and included 5-story mixed use zoning and maximized the allowable uses for the zones with an emphasis on allowing auto repair and industrial businesses to expand and thrive in existing heavy commercial areas. The City Council was generally supportive of the Broadway Plaza retail promenade concept, but emphasized safety and crime prevention. The Council had varying opinions on parking in the downtown, but largely agreed that five-story zoning on the south side of Broadway between Kempf Street and Lemon Grove Avenue would be beneficial to downtown revitalization if additional public parking was provided.

Discussion:

Through the Public Outreach process, the Lemon Grove community has expressed a desire for change and relayed perceptions about vagrancy, criminal activity, and lack of maintenance and cleanliness within Downtown Lemon Grove. The Baseline Opportunities and Constraints Report further identifies constraints that prevent the downtown area from achieving its full development potential, including: a predominance of small parcels that require assembly to accommodate higher density development; the City's limited land ownership within the Specific Plan area requires the ability to leverage market forces and developer incentives to trigger desired changes; and an abundance of established land uses that increase costs of redevelopment. These perceptions coupled with the challenges identified in the Background Report likely contributed to the incomplete realization of the 2005 Downtown Village Specific Plan's vision for a vibrant and sustainable downtown.

In order to achieve the DSP's expanded vision of a vibrant downtown with attractive public spaces, the City needs added revenue and investment to maintain and improve downtown. However, the City's top revenue sources of retail sales tax, property tax and hotel transient occupancy tax are currently insufficient to produce this outcome. The Market and Economic Analysis in the Background Report observes that more people are needed in the downtown to attract the retailers and entertainment oriented land uses the community wants. To accomplish this, the Background Report states that the City needs to provide enticing development opportunities by including market rate housing among four (4) and five (5) story mixed-uses and create an efficient, cost-effective regulatory environment for development. City records indicate that Downtown Village Specific Plan areas zoned five stories yielded over 3 acres of redevelopment with 220 new dwelling units over the last four years while areas zoned for three stories yielded none. Through the addition of more market rate housing and employment centers and the resulting families and

professionals in the DSP area, the City can attract more entertainment oriented land uses and high-quality retailers desirable to the community.

The DSP aims to provide these enticing development opportunities by expanding the acreage of land designated for five (5) story mixed-use from approximately nine (9) to 47 acres and by including over 10 acres of five (5) story employment center designations. While the DSP also requires project developers to pay their fair share for downtown street improvements, parks, wayfinding and gateway signage, and safety and maintenance, development within the Specific Plan area will be prioritized and additional incentives will be available for community benefits to provide further incentives for project applicants. The creation of Community Facilities Districts is expected within the DSP to fund long-term maintenance and programming for these improvements. Expanded redevelopment opportunities in conjunction with the DSP requirements to construct and/or fund infrastructure improvements is anticipated to create a more supportive business climate in a livable, walkable, and vibrant downtown setting.

Environmental Analysis:

A Mitigated Negative Declaration (MND) of Environmental Impact was prepared for the DSP pursuant to the requirements of the California Environmental Quality Act (CEQA). The MND identified potential impacts to: Air Quality; Cultural Resources; Geology & Soils Greenhouse Gas Emissions; Hazards & Hazardous Materials; Noise; Public Services; Recreation; Transportation/Circulation; Tribal Cultural Resources; Utilities and Service Systems; and Mandatory Findings of Significance. Mitigation Measures included in the MND would reduce all the aforementioned, potential impacts to below a level of significance and include: requiring a historical survey prior to the demolition or remodel of any building over 50 years old; cultural and paleontological monitoring during any ground disturbing activities; requiring environmental assessments when soil disturbance is proposed; requiring public service assessments and fair share contributions from project applicants; traffic intersection signalization for several existing intersections; and supplemental traffic analysis requirements near buildout; among others. The MND was sent to the State Clearinghouse and made available for public review over a 30 day period from March 15, 2018 to April 14, 2018.

Comments from the Department of Toxic Substances Control were received on April 5, 2018 and additional comments from state agencies and the public are expected before the review period ends on April 14, 2018. All comments will be collected and addressed in a single document that will be provided to the Council and made available to the public at the hearing on April 17, 2018.

Public Information:

The Notice of Public Hearing was published in the March 15, 2018 edition of the East County Californian and mailed to all property owners within 500 feet of the subject property.

A Native American Tribal Government Consultation was conducted pursuant to Government Code Sections 6540.2, 65092, 65351, 65352.3, 65352.4, 65562.5 et. seq.

Additionally, the community surveys and three community workshops were held including a workshop with the City Council. Workshop attendees and community stakeholders were notified.

The City received comments from the Department of Toxic Substances Control on April 5, 2018 in response to the Notice of Public Hearing and Environmental Analysis and additional comments from state agencies and the public are expected before the review period ends on April 14, 2018.

Staff will provide the Council with all comments and responses in a single document at the time of the public hearing.

Conclusion:

Staff recommends that the City Council conduct the public hearing, introduce and conduct first reading of the Ordinance (**Attachment B**) which includes approval of the DSP and certification of the MND with any corrections proposed by the City Council coordinated by City Staff. Upon expiration of the SGIP SANDAG Grant on May 20, 2018, the City will no longer be able to reimburse its contractor.

Attachment B

ORDINANCE NO. 449

AN ORDINANCE OF THE CITY OF LEMON GROVE CITY COUNCIL APPROVING THE DOWNTOWN SPECIFIC PLAN (GPA-180-0001) AND CERTIFYING MITIGATED NEGATIVE DECLARATION (ND18-01)

WHEREAS, the Community Development Element of the 1996 Lemon Grove General Plan anticipated the preparation of a specific plan for the traditional downtown commercial district at Broadway and Lemon Grove to optimize village redevelopment efforts and achieve community objectives; and

WHEREAS, the City Council adopted the Broadway Commercial Project Specific Plan (SP92-01) providing land use regulation for the Home Depot site at 7530 Broadway on July 20, 1992 with subsequent amendments; and

WHEREAS, the City Council adopted the Downtown Village Specific Plan on June 7, 2005 with subsequent amendments; and

WHEREAS, on March 3, 2015, the City Council approved Resolution 2015-3315 authorizing the submittal of a grant application for the Downtown Village Specific Plan Expansion Project; and

WHEREAS, on July 24, 2015, the City Council received a Notice of Smart Growth Incentive Program Planning Grant Award of $175,000 from SANDAG; and

WHEREAS, on November 17, 2015, the City Council approved a professional services agreement with Rick Engineering for the preparation and execution of the Downtown Village Specific Plan Expansion Project; and

WHEREAS, on January 5, 2016, the City Council approved a revised professional services agreement with Rick Engineering to provide additional economic, land use, and traffic analysis; and

WHEREAS, on August 27, 2016 and December 10, 2016, City Staff held Community Workshop #1 and Community Workshop #2 to engage the community on key issues and opportunities of the Downtown Village Specific Plan Expansion; and

WHEREAS, on April 8, 2017, City staff held a City Council Workshop to provide public outreach findings and consultant recommendations; and

WHEREAS, on April 17, 2018, the City Council duly noticed and held a public hearing to consider the Specific Plan Amendment (GPA18-001); and

WHEREAS, a Negative Declaration of Environmental Impact (ND18-01) regarding the Specific Plan Amendment (GPA18-001) will be filed subsequent to its adoption and the approval of the proposed project by the City Council; and

WHEREAS, the City Council finds that this Specific Plan Amendment is necessary for the public interest and is consistent with the purpose and intent of the Specific Plan and Lemon Grove General Plan; and

WHEREAS, the City Council finds that this Specific Plan Amendment is necessary to promote a vibrant and thriving business environment, and leverage development opportunities near the transit station to achieve goals related to economic development, place making, and increased mobility; and

WHEREAS, at said public hearing, the City Council finds that the proposed Specific Plan is consistent with Sections 65450-65456 of the Government Code.

NOW, THEREFORE, BE IT RESOLVED that the City of Lemon Grove City Council hereby:

SECTION 1. Finds and determines that the facts set forth in the recitals of this Resolution are declared to be true; and

SECTION 2. Finds and determines that the project deliverables are completed per the scopes of work for the Rick Engineering Professional Services Agreement and for the SANDAG SGIP Grant Agreement to the satisfaction of City staff and the City Council and finds that the final deliverables fulfill the SANDAG SGIP Grant requirements; and

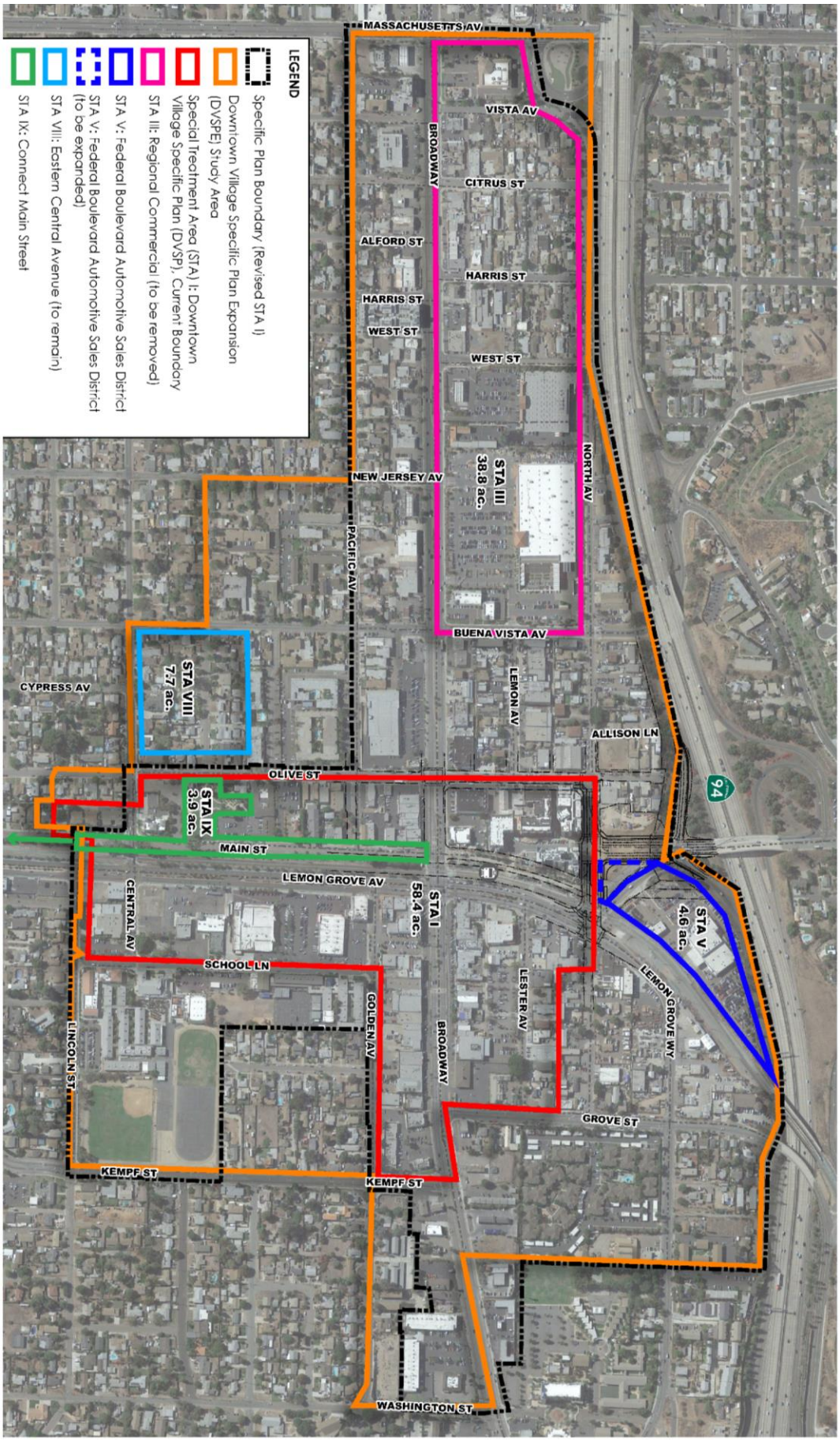
SECTION 3. Certifies the adequacy of the Mitigated Negative Declaration of Environmental Impact (ND18-01); and

SECTION 4. Approves General Plan Amendment GPA-180-0001 and adopts the Downtown Specific Plan (Exhibit A) as a comprehensive update and expansion to the existing Downtown Village Specific Plan, expands the boundaries of Special Treatment Area I, dissolves Special Treatment Area III, and extends the boundaries of Special Treatment Area V west to the realigned intersection of Lemon Grove Avenue and North Avenue (Reference Figure 1.2-4 in Exhibit A); and

SECTION 5. Rescinds the 2005 Downtown Village Specific Plan and subsequent amendments and the 1992 Broadway Commercial Project Specific Plan which governs the Home Depot site and subsequent amendments; and

SECTION 6. Exempts applications deemed complete prior to the effective date of this Ordinance from the regulations of the Downtown Specific Plan (Exhibit A), including any resulting changes to fees and/or infrastructure or fair share costs, for a period of two years from the effective date of this ordinance.

Attachment C



DVSPE STUDY AREA, SPECIAL TREATMENT AREAS, & SPECIFIC PLAN

FIGURE 1.2-4

Attachment D

Exhibit “A” – DRAFT Downtown Specific Plan

Available at: www.tinyurl.com/dvspe

Attachment E

Exhibit “B” - DRAFT Mitigated Negative Declaration ND18-01 w/ MMRP

Available at: www.tinyurl.com/dvspe

MARCH 2018

CITY OF LEMON GROVE

DOWNTOWN SPECIFIC PLAN

RICK

RICK
Community Planning
5620 Friars Road
San Diego, CA 92110

MARCH 2018

CITY OF LEMON GROVE

DOWNTOWN SPECIFIC PLAN

PREPARED FOR & SUPPORTED BY:

CITY OF LEMON GROVE
Development Services Department

CITY COUNCIL

Racquel Vasquez, Mayor

Jerry Jones, Mayor Pro Tem

Jennifer Mendoza

David Arambula

Matt Mendoza

PROJECT STAFF

James Lough, City Attorney

Lydia Romero, City Manager

Mike James, Assistant City Manager/
Public Works Director

David De Vries, Development Service Director

Tim Gabrielson, City Engineer

Scott Amos, Lemon Grove Substation Lieutenant

Chris Jensen, Fire Marshal

Miranda Evans, Management Analyst

Mike Viglione, Assistant Planner

Jeremiah Harrington, Assistant Engineer

PREPARED BY:

RICK
Community Planning

CONSULTANT TEAM

Brian Mooney, FAICP
Principal

Danny Serrano, AICP
Senior Community Planner

Dann Mallec
Principal Project Planner

Spencer Richard
Assistant Community Planner

Mark Jugar, PE, TE, PTOE
Traffic Engineer

Josiah Shultz, PE
Traffic Designer

Kerri Kress
Senior Graphic Designer

Mario Terrazas
GIS Project Manager

Carlos Pelayo
Assistant 3D Laser Scanning Technician

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1.0 INTRODUCTION

CONCEPTUAL PERSPECTIVE OF A BOARDWALK PLAZA IN EAST BROADWAY

1.1 EXECUTIVE SUMMARY

The 1996 Lemon Grove General Plan identified several Special Treatment Areas (STAs) which warranted special planning attention due to unique neighborhood conditions and potential. The area surrounding the intersection of Broadway and Lemon Grove Avenue was identified as the downtown commercial district and designated as STA I. In 2005, the City refined STA I by adopting the Downtown Village Specific Plan (DVSP) which sought to stimulate a vibrant, transit oriented neighborhood for Downtown Lemon Grove. In 2015, in order to promote economic development, cleanliness and safety in the downtown, the City Council expressed interest in exploring new opportunities and expanding the DVSP which led to the preparation of this document, the Downtown Specific Plan (DSP).

At 219 acres, the DSP area quadruples the size of STA I (DVSP) and seeks to leverage development opportunities near the City's transit stations and throughout the commercial core of the City and energize the downtown. Goals related to economic development, place making, maintenance, safety and mobility aim to improve the City's public spaces and attract land uses ideal for families and professionals. New Art and Historic Districts are proposed. Outdoor live music, events, dining and activities will be a part. The DSP includes form based code and a variety of zoning districts, each with its own vision and set of by-right land use and architectural design regulations intended to retain the character of the existing downtown and civic areas and create more modern neighborhoods with emphasis on the arts adjacent to the trolley and freeway. This Specific Plan will allow up to five story buildings with setbacks on upper stories which will compliment the expanded pedestrian oriented sidewalks and street amenities. An emphasis on increased housing will attract quality restaurants and retailers desired by the community. Past development trends from 2005 to current show that five story zoning, low fees, and expedited reviews are essential for redevelopment in the downtown. The DSP incorporates increased densities and intensities supported by a pedestrian oriented multi-modal circulation network to catalyze pedestrian oriented streets, parks and open spaces, support local

businesses, and expand the City's housing, retail, entertainment, office and hotel network. No City funds are used for these efforts.

1.2 LEGAL AUTHORITY

The Lemon Grove Downtown Specific Plan (hereinafter referred to as "Specific Plan") is established through the authority granted to the City by California Government Code, Sections 65450 through 65457, as a means of systematically implementing the General Plan. A specific plan, through text and diagram(s), must identify the following:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
3. Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
4. A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

The primary effect of a specific plan is the establishment of a clear and detailed plan for a specific area. Existing zoning is replaced with development standards of the specific plan which best meet the needs of the specific area. After adoption by the City of Lemon Grove, all public and private development projects and improvements must be consistent with the adopted Specific Plan. State Law requires that a specific plan be in conformance with a city's general plan. This Specific Plan has been prepared in conformance with the City of Lemon Grove General Plan. The DSP incorporates a General Plan Community Development Element Amendment which includes the expansion of Special Treatment Area (STA) 1 – Downtown Village, the elimination of STA III – Regional Commercial and the expansion of STA V – Automobile Sales District (Figure 1.2-4). The DSP also incorporates a General Plan Mobility Element Amendment which includes amended pedestrian and bicycle corridors and designations, gateway and wayfinding signs, and revised street designs. The guidelines, policies and requirements in this Specific Plan supersede the requirements of the City's Municipal Code and General Plan where applicable. If there is a conflict between the regulations in the City's Municipal Code and the DSP, the regulations in the DSP shall prevail.

1.3 SPECIFIC PLAN AREA

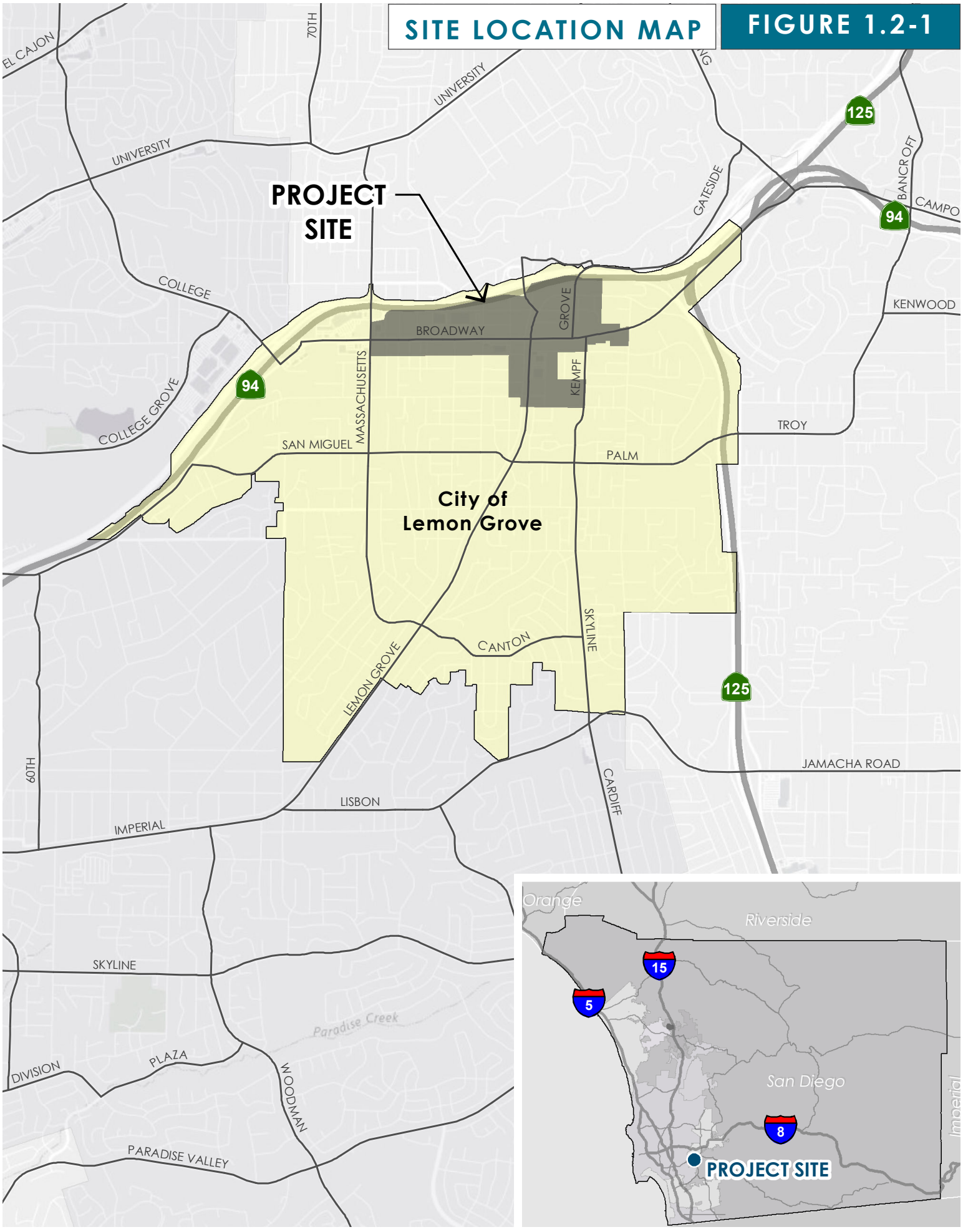
The Specific Plan area is located entirely within the City limits and is generally bounded to the north by State Route 94, to the east by Washington Street, to the south by Lincoln Street, and to the west by Massachusetts Ave as shown in **Figure 1.2-1 (Site Location Map), Figure 1.2-2 (Vicinity Map)** and **Figure 1.2-3 (Specific Plan Boundary)**. The area covers approximately 219 gross acres. The Specific Plan area falls within a walkable distance to mass transit (trolley and bus service).

The Specific Plan area also encompasses other Special Treatment Areas that are identified in the General Plan, including STA I – Downtown Village (2005 Downtown Village Specific Plan), STA III - Regional Commercial, and STA V -Automotive Sales District. STA III is dissolved with this Specific Plan though STA V is slightly expanded to the west consistent with the new realignment. STA IX, within the Specific Plan area, is located along Main Street, south of Broadway. The STAs, the Specific Plan

boundary, and the Downtown Village Specific Plan Expansion (DVSPE) study area are shown on **Figure 1.2-4 (DVSPE Study Area, Special Treatment Areas, and Specific Plan).** The Specific Plan boundary also includes a few parcels outside of the DVSPE study area along the north side Broadway and west of Washington Street. The Specific Plan area is approximately four times larger than the DVSP area and will become the expanded STA I area.

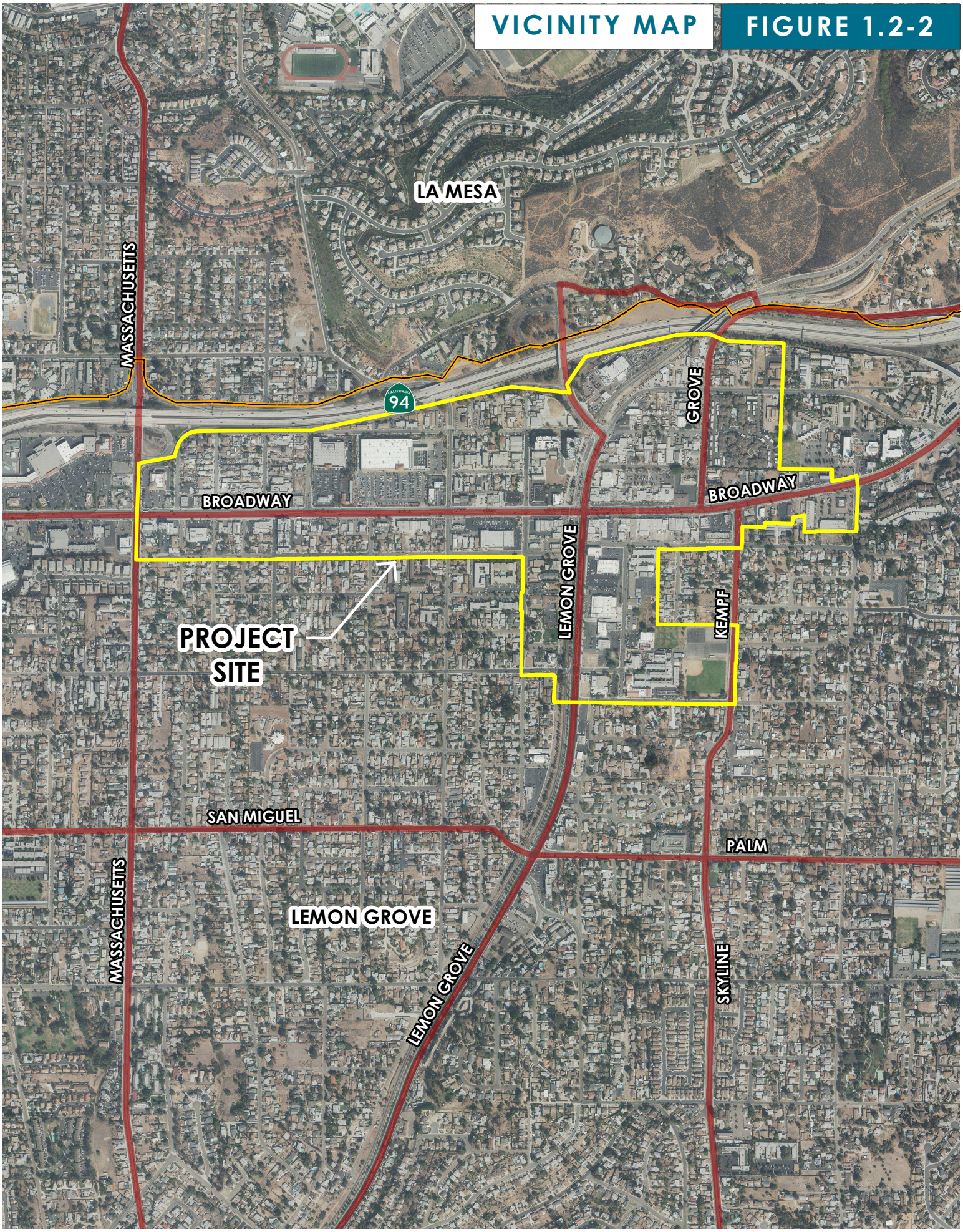
SITE LOCATION MAP

FIGURE 1.2-1



VICINITY MAP

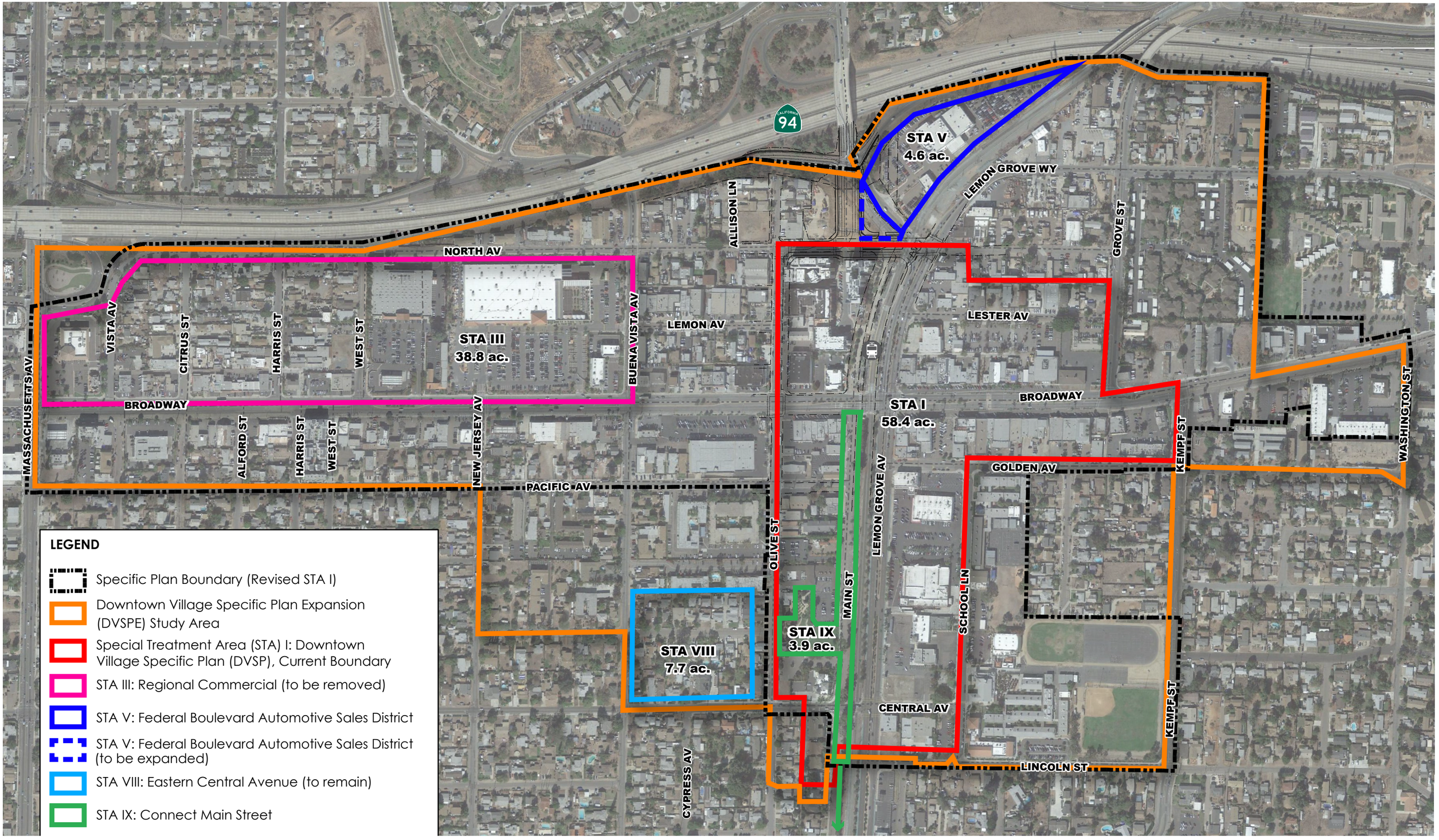
FIGURE 1.2-2




CALIFORNIA
94
NORTH AV
ALLISON LN
LEMON GROVE WY
GROVE ST
LESTER AV
LEMON AV
BUENA VISTA AV
VISTA AV
CITRUS ST
HARRIS ST
WEST ST
MASSACHUSETTS AV
BROADWAY
ALFORD ST
HARRIS ST
WEST ST
NEW JERSEY AV
PACIFIC AV
OLIVE ST
MAIN ST
LEMON GROVE AV
SCHOOL LN
GOLDEN AV
KEMPF ST
CENTRAL AV
LINCOLN ST
CYPRESS AV
WASHINGTON ST
LEGEND
Specific Plan Boundary

DVSPE STUDY AREA, SPECIAL TREATMENT AREAS, & SPECIFIC PLAN

FIGURE 1.2-4



1.4 PURPOSE OF THE SPECIFIC PLAN

The purpose of the City of Lemon Grove Downtown Specific Plan (DSP) is to manage future development of the downtown area. This Specific Plan is the primary document governing land use decisions, regulating development and design, guiding improvement of the area's physical and economic environment, and establishing the City's goals and expectations for downtown development.

1.5 GENERAL PLAN GUIDANCE

Lemon Grove's 1996 General Plan (General Plan) articulates a city-wide desire to embrace its small-town feeling and heritage and provide opportunities for all people to participate in its rich community life. Through its policies and objectives, the General Plan strives to harmonize community development and business interests with broader public health, safety and well-being in a balanced community. An update to the General Plan is currently underway; however, the General Plan's overall vision for this Specific Plan area is anticipated to remain consistent.

The Special Treatment Areas identified in the Community Development Element of the General Plan are consistent with, and support the preparation of, this Specific Plan. These STAs, shown in **Figure 1.2-4**, have significant potential for new development or redevelopment or require special planning attention. The General Plan parameters for the STAs in the Specific Plan area are supportive of mixed-use transit oriented development, commercial and/or residential uses. The Specific Plan seeks to build upon this vision of the General Plan and provide more detailed guidance for the Specific Plan area.

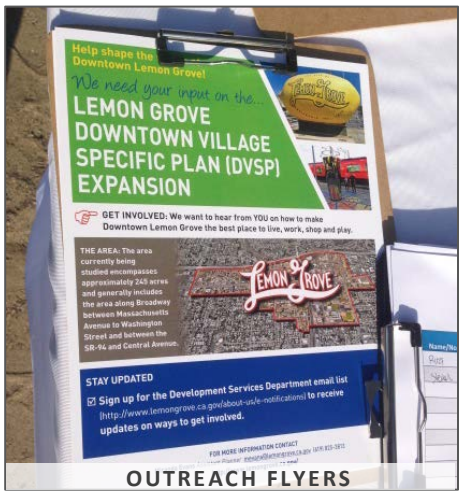
1.6 THE PLANNING PROCESS

The development of this Specific Plan builds upon a series of previous planning efforts. In 2005, the City adopted the Downtown Village Specific Plan (DVSP) which is synonymous with the 1996 General Plan STA I boundaries. The DVSP was designed to stimulate economic development through mixed-use and transit-oriented development opportunities downtown. In 2015, the City Council expressed interest in exploring new opportunities downtown after the San Diego Association of Governments (SANDAG) identified an expanded Smart Growth Area in the City's Downtown. SANDAG is a regional agency that leads planning and transportation efforts for the San Diego region. Subsequently, the City was awarded a grant to expand the DVSP to be consistent with SANDAG's Smart Growth Concept Map's expanded smart growth area (LG-2). As such, this Specific Plan area is approximately four times larger than the 2005 DVSP area. A key goal of updating the DVSP and incorporating the larger area for this Specific Plan is to leverage development opportunities near the City's transit stations and to achieve goals related to economic development, place making, maintenance, safety and mobility that improve the City's public spaces and attract land uses that are ideal for families and professionals.

The City's public outreach process has ensured that the community has a voice in the decision-making process. The public outreach process included:

- A project webpage
- A social media campaign
- Community group meetings
- Five pop-up events throughout the City
- Door-to-door canvassing downtown sharing flyers with business owners

- Bilingual project flyers distributed in places of interest and posted in City facilities
- Property owner notifications
- E-notifications to stakeholders
- Two media advisories and articles in the *San Diego Union Tribune* and *The Grove Gazette*
- School District assisted all-calls to parents
- A Business Owner Survey (Nine completed)
- A Property Owner and Stakeholder Survey (156 completed)
- Two community workshops and one City Council workshop



OUTREACH FLYERS

The completed business owner surveys provided insights into the attractors and challenges of operating a business in downtown. Generally, business owners cited competitive rents or property values and convenient freeway access as the major attractors of conducting business downtown. The major challenges cited include unappealing physical building aesthetics and a perceived lack of maintenance and cleanliness throughout the area. Another challenge to conducting business in the area is the perception of high crime. Business owners expressed belief that streetscape improvements, façade improvements, and wayfinding signage will improve their business opportunities.

Results of the property owner and stakeholder surveys indicate that most residents visit downtown at least once a week. Primary reasons for doing so include activities, such as dining out, shopping, and visiting the post office. However, most residents do feel that downtown is not family-friendly and would like to see more food and drink venues, entertainment venues, and shops. Deterrents to visiting the Downtown area include a lack of parking and maintenance/cleanliness and the perception/presence of homeless, vagrancy, and criminal activity. Residents also cited that shopping choices were limited and that they would like to see a greater variety of retail sales and services. Respondents indicated that they were open to the formation of themed districts, such as an Arts District and Historic District. When asked about preferred housing types, respondents indicated that they were open to stacked flat apartments, townhomes, and live work units.

Community Workshop #1 was held at the Lemon Grove Community Center on Saturday, August 27, 2016. The purpose of Workshop #1 was to engage the community on key issues and opportunities based on general feedback and the background report. An estimated 82 participants attended Workshop #1. Five stations related to the following topics were set up:

- Neighborhoods and Vision
- Land Use and Density
- Mobility
- Urban Design and Arts
- Business and Economic Development

Based on the participant feedback, Workshop #1 attendees were open to two-to-five story buildings in the downtown, but also wanted to retain the City's small-town feel. A lack of maintenance/cleanliness,

the perception/presence of homeless/transients, and criminal activity was the largest deterrent to community members spending more time downtown. There was community concern regarding new affordable housing developments and a preference to see market rate housing. There was also community concern regarding reductions in parking and potentially increased traffic. More family oriented uses and business professional offices were highly desired (e.g. restaurants, breweries, brewpubs, movie theatres). Generally, attendees were open to office and hotel type uses. Having a larger mix of businesses was also desired. Allowing for art and providing an art district was generally well supported. Attendees requested safe walking and biking connections between destinations within the downtown corridor and ranked pedestrian access as a high priority. Creating a more walkable downtown with more trees/shade and seating/plaza areas was a high priority. Additional park and parkette areas were also desired downtown.

COMMUNITY WORKSHOP #1

Community Workshop #2 was held at the Lemon Grove Recreation Center on Saturday, December 10, 2016. The purpose of this second workshop was to obtain community feedback on specific alternatives to shape the draft plan. Approximately 61 community stakeholders attended the workshop; only a few of the participants were return visitors from the first workshop held in August 2016. The Workshop #2 format included four stations related to the following topics:

- Neighborhoods and Land Use
- Mobility and Connections
- Urban Design, Art and Parks
- Business and Economic Development

Per the feedback received during the workshop in regards to business and economic development, respondents reiterated three major constraints to economic development within the Downtown study area, which include a lack of strong identity, relatively low median household income and an overall lack of economic generators. Multiple respondents also identified increased trash, a lack of maintenance or cleanliness and homelessness as problems that should be addressed.

Based on participant feedback, stakeholders were excited about change in the downtown, but in part want to retain a small town ambiance or village feel. No respondents selected the 'No Change Alternative' at the workshop which would keep planned land uses as is, as their desired scenario. Respondents were very supportive of concepts like a Broadway road diet and plaza space, an arts district and historic district, expanded pedestrian corridors, and creating opportunities for outdoor live performances.


COMMUNITY WORKSHOP #2


COMMUNITY WORKSHOP #3

On April 8, 2017, Workshop #3 was held with the City Council. All five councilmembers and four community stakeholders attended Workshop #3. The City Council Workshop provided an overview of the existing DVSP, the SANDAG grant, the Baseline Opportunities and Constraints Report, and results from the public outreach program. The presentation focused on three topics in association with the DVSPE: 1) Vision and Goals, 2) Land Use, and 3) Mobility with the City Council and public provided feedback as it relates to each topic and/or the project as a whole. The City Council generally supported the higher density aspect, pedestrian orientation, and themed concepts of the downtown with the understanding that these will be economic drivers for the City.

For the review of the draft DSP, property owners within 500 feet of the DSP boundary, community stakeholders, past workshop attendees, adjoining localities, MTS representatives and the State Clearinghouse were notified of the City Council public hearing and the availability of the Draft DSP and Mitigated Negative Declaration (MND) under consideration for adoption and certification respectively.

The multitude of comments and input collected from the public outreach process has shaped the direction and contents of this Specific Plan. The allowed land uses, development standards, design guidelines, and implementation strategies in this Specific Plan reflect the input of the diverse members of the community.

1.7 CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

It was determined that the implementation of this Specific Plan would have the same or fewer impacts than implementation of the General Plan policies and zoning currently in effect. Based upon a scoping of the issues and technical studies, it was determined that a “mitigated” Negative Declaration was the appropriate environmental document for this project to be in compliance with the California Environmental Quality Act. Potentially significant impacts mitigated to below a level of significance are included in the certified Mitigated Negative Declaration of Environmental Impact (MND). Property owners within and within 500 feet of the DSP boundary, community stakeholders, past workshop attendees, adjoining localities, MTS and the State Clearinghouse were notified of the availability of the Draft MND.

1.8 RELATIONSHIP TO THE GENERAL PLAN

This Specific Plan is consistent with the Lemon Grove General Plan as required by the California Government Code. This Specific Plan reinforces the General Plan goals and policies for the area and provides the detail and specificity necessary to serve as systematic implementation tool. The measures contained in this Specific Plan are regulatory by design and become effective as regulations in the

Specific Plan area upon adoption by City Council ordinance. See Section 1.2 (Legal Authority) for further clarification.

1.9 RELATIONSHIP TO THE MUNICIPAL CODE

This Specific Plan constitutes the primary zoning provisions for the Specific Plan area. This Specific Plan provides a vision and additional detail and specificity for the Specific Plan area such as planning areas, zoning districts, circulation network, policies, standards and regulations. These Specific Plan requirements supersede the requirements of the City of Lemon Grove's Municipal Code. If there is a conflict between the regulations provided in the City's Municipal Code and this Specific Plan, the regulations provided in the Specific Plan shall prevail. Where direction is not provided in this Specific Plan, the provisions of the City's Municipal Code shall prevail. See Section 1.2 (Legal Authority) for further clarification.

1.10 SPECIFIC PLAN CONTENTS

This Specific Plan contains six chapters as follows:

Chapter 1.0 Introduction: Provides an executive summary, summary of public outreach, legal framework and a broad overview of the plan and the process that went into creating the plan.

Chapter 2.0 Existing Conditions: Provides information on the existing conditions within the Specific Plan area, including the regulatory, physical, demographic, and economic environment. Identifies various opportunities and constraints that led to the creation of the planning framework.

Chapter 3.0 Vision: Identifies overall vision, goals, objectives and policies which establish the "framework" for the land use plan, development standards, design guidelines, streetscape plan, and implementation mechanisms.

Chapter 4.0 Land Use Plan: Translates framework goals and implementing actions into specific land use plans and associated development and design standards.

Chapter 5.0 Mobility: Provides design standards for streetscape improvements within the primary public rights-of-way.

Chapter 6.0 Implementation and Administration: Provides a summary of recommended public improvements and programs and implementation tools and strategies.

1.11 SEVERABILITY

If any regulation, condition, program or portion thereof of this Specific Plan is held invalid or unconstitutional by any court of competent jurisdiction, that portion shall be deemed a separate, distinct and independent provision and the invalidity of that provision shall not affect the validity of the remaining portions.

2.0 EXISTING CONDITIONS

2.1 INTRODUCTION

The Existing Conditions Chapter provides essential background information for the Specific Plan area regarding the condition of its physical components (e.g., streets, utilities, etc.) and a summary of the area's opportunities and constraints based on the City's Baseline Opportunities and Constraints Report (April 2017).

2.2 HISTORICAL CONTEXT

The history of Lemon Grove dates back to 1869 when Robert Allison purchased a portion of Rancho Mission San Diego and became the City's first resident. A rail line was extended from San Diego to Lemon Grove in 1890, and the production of citrus and berry crops boomed in the warm, temperate climate. The community's first subdivision was later built in 1892 which resulted in 15 - 20 structures constructed. The center of town developed along the rail lines and included a small rail depot and the first general store, which also housed the post office and a school.

Today, the City of Lemon Grove is not only known for having the best climate on earth, it is also characterized by a well-established land use pattern. The commercial and industrial areas of the City are primarily located along Broadway and Federal Boulevard in the northern part of the City. The traditional downtown near Broadway and Lemon Grove Avenue provides shopping opportunities primarily oriented to residents and workers. Commercial activity extends southward along Lemon Grove Avenue as well. The State Route 94 and 125 freeways and the San Diego Trolley Orange Line provide regional access. The Lemon Grove monument – the world famous 3,000-pound lemon – sits prominently downtown, and recalls images of the community's industrious spirit and agricultural roots. Moreover, many buildings from the Lemon Grove's early days still stand and provide a connection to the community's historic origins. The City originally incorporated in 1977, encompasses approximately four square miles, and is home to a diverse population of over 26,000 residents.


H. LEE HOUSE

"THE BIG LEMON" MONUMENT

2.3 EXISTING CONDITIONS, OPPORTUNITIES AND CONSTRAINTS

The Baseline Opportunities and Constraints Report was prepared to assist with the development of the Specific Plan. The report inventoried existing conditions and serves as a starting point to identify possible implementation tools for future programs and projects to help the City achieve its desired vision for a vibrant downtown. A brief summary of the report topics and the identified opportunities and constraints are found below.

CHARACTER:

The City is home to a handful of Mission Style buildings that are interspersed throughout the Specific Plan area which pay respect to the historical Spanish colonial architectural style. Completed in 2012, the Lagoon Community Church houses East County's oldest Protestant congregation, which organized in 1894. The church's long history in the region may explain their decision to pay homage to the City's historical roots by using the Mission Style of architecture.

SONKA BROS' GENERAL STORE

HISTORIC BUILDING

The City was largely built out in the 1940's, 50's and 60's when the automobile dominated land use decisions which made the majority of the City auto-centric with parking lots fronting the street and sidewalks. More recently, four new housing projects downtown stand out for their clean and contemporary design and multiuse functions (Citron Court, Citronica I and II, and Celsius I).


CITRON COURT


PUBLIC ART

Public Art is also found within the Specific Plan area, including the Buena Vista Art Mural, the Lemon Grove Historical Mural, the Breezeway Lemon Mural, the Lemon Grove Rising Mural at the Community Center and the "Big Lemon." The recently constructed Main Street Promenade also features time themed public art pieces that are both accessible and open to the large volume of pedestrians boarding the Trolley at the nearby Lemon Grove Trolley Depot.

There are a handful of big corporate commercial developments located on Broadway with large lot sizes and parking areas fronting the street. These buildings feel automobile-centric and can intimidate pedestrians walking from the Lemon Grove Trolley Depot to nearby stores.


CORPORATE COMMERCIAL BUILDINGS

CORPORATE COMMERCIAL BUILDINGS

Strip malls are pervasive in the Specific Plan area. Each strip mall has its own distinct building age, setback, style, and materials. The differences among strip commercial projects create abrupt visual disruptions for the pedestrian and do not contribute to a common community identity or consistent visual experience for those who are walking through the downtown.

STRIP MALLS ALONG BROADWAY

Visitors first entering downtown Lemon Grove might assume that the town is known for a robust auto service industry, as opposed to its historic pastoral roots or niche small businesses, due to the abundance of auto-related retail uses. Broadway currently features a large concentration of auto-related retail shops within a single mile.

AUTO REPAIR SHOPS


AUTO REPAIR SHOPS

While parts of Broadway and Lemon Grove Avenue have clearly delineated sidewalks and roadways, the rhythm and networks of the sidewalks are continually disrupted by driveway entries and other hazards. These public spaces are sparsely landscaped and there is no unified theme to street furniture nor any consistent placement, shape, size, or color. Moreover, high quality or consistent and themed signage is not found in the study area.


SIDEWALK WITHOUT LANDSCAPE RELIEF


SIDEWALK WITHOUT LANDSCAPE RELIEF

Overall, many areas within the Specific Plan area lack visual interest, are not pedestrian friendly, and/or are not well maintained. Opportunities exist within the Specific Plan area to enhance the visual character to attract development, residents and visitors. These enhancements include improvements to the overall visual landscape of the area, developing an arts or historic district, allowing and requiring

art within the downtown, the installation of street trees, landscape, lighting, furniture, shade structures and amenities, and implementing public art displays, façade improvements, green-street designs, a wayfinding program and gateway signs to highlight entrances into the downtown area (a sense of place and belonging). Design regulations could require unique architecture and design within the downtown. Providing regional destinations unique to the City could also be an economic driver. Funding is the biggest constraint to improving downtown Lemon Grove's character, but developers should pay their fair share for improvements within the downtown

LAND USE: The Specific Plan includes approximately 219 gross acres and encompasses other Special Treatment Areas (STAs) identified in the General Plan, including STA I – Downtown Village (2005 Downtown Village Specific Plan), STA III - Regional Commercial, and STA V - Automotive Sales District. Downtown Lemon Grove houses numerous civic uses (e.g., City Hall, Civic Center Park, Lemon Grove Library), historic and cultural uses (e.g., the "Big Lemon" Monument and the H. Lee House), retail and commercial uses, residential uses and parks. Generally, Downtown Lemon Grove is the symbolic center of the City for residents and visitors alike.

Existing land use patterns within the Specific Plan area pose many constraints preventing the City from achieving full development potential within the study area. These constraints include: a predominance of small parcel sizes that would likely require assembly to accommodate higher density development; the City's limited land ownership within the Specific Plan area requires the ability to leverage market forces and developer incentives to trigger desired changes; and an abundance of established land uses (already developed and operating) that increases costs of redevelopment.

There are many land uses and factors the City could utilize to encourage and promote development within the Specific Plan area. These land use factors include the City's central location, the presence of a trolley station, a walkable geographic area, and many underutilized or vacant parcels. These land use factors can form the foundation for the City to implement a comprehensive specific plan that could incentivize increased development to establish a more livable, walkable and pedestrian-oriented environment. Through the addition of more market rate housing and employment centers and thereby bringing families and professionals into the DSP area, the City can attract more entertainment oriented land uses and high-quality retailers desirable to the community (e.g., movie theatres, sit-down family restaurants, breweries). The most critical opportunities include reducing development costs through low fees, short development review and entitlement timelines, minimized City requirements, zoning allowances for five story mixed-uses, and allowances for entertainment and employment oriented land uses and high-quality retailers. Another factor includes creating additional park spaces and improving existing parks with appropriate amenities and programs to attract families and professionals. Lemon Grove would also benefit through new regional destinations and shopping experiences that include unique art and architectural features.

MOBILITY: Massachusetts Avenue, Lemon Grove Avenue and Broadway carry a significant proportion of the vehicular volumes in the City. Broadway runs through the Specific Plan area in an east-west direction, parallel with State Route (SR) 94. Lemon Grove Avenue runs north-south from the SR-94 off-ramp to the southern boundary of the City. Massachusetts runs north-south along the western edge of the Specific Plan boundary. The Lemon Grove Avenue off-ramp Realignment provides increased access

to the SR-94 from the west side of the trolley line and provides a central gateway to the City's downtown.

The Metropolitan Transit System provides public transit service in the Specific Plan area. The Orange Line Trolley stops at the Lemon Grove Trolley Depot, located at Broadway and Lemon Grove Avenue. Two main bus routes serve the Specific Plan area, Route 856 (Cuyamaca to SDSU Transit Center) and Route 936 (SDSU to Spring Valley), which are among some of the busiest bus routes in the region with the Route 936 stop experiencing an average of 500 weekday trips in 2017

In general, City of Lemon Grove roadways carry little bicycle traffic, with the majority concentrated near the intersection of Broadway and Massachusetts Avenue. Skateboarding is popular amongst the under 40 age group and is a basic mode of transportation in the City.

The City of Lemon Grove has a high level of pedestrian activity concentrated near the Lemon Grove Trolley Depot at the intersection of Broadway and Lemon Grove Avenue. There is also significant pedestrian activity at the intersections of Central Avenue and Lemon Grove Avenue and Lincoln Street and Skyline Drive due to the schools nearby.

The street network throughout the Specific Plan area often exhibits wide streets creating a favorable environment for road diets, sidewalk expansions, landscaping, lighting and the installation of buffered bicycle facilities. Traffic on the west side of the trolley tracks is more constrained whereas traffic on the east side of the tracks operates at high service levels allowing for road diets and more growth and density. There are two existing conditions within the Specific Plan area that pose constraints towards implementing an efficient circulation system: 1) the State Route 94 and Lemon Grove Avenue Interchange; and 2) the trolley station and tracks that cause vehicle and pedestrian congestion at the intersection of Broadway and Lemon Grove Avenue. There are long-term plans to grade separate the trolley line in place to alleviate these issue areas; however, there is a need for interim interventions to accommodate a more efficient pattern of circulation for pedestrians and vehicles. Lack of funding is the biggest constraint to improving the mobility of the downtown.

INFRASTRUCTURE: Helix Water District provides water service and the Lemon Grove Sanitation District manages and maintains the City-wide sewer system. There are four major drainage basins in the City, three of which lie within the Specific Plan area. All drainage facilities are owned and maintained by the City of Lemon Grove. A number of companies provide wireless or cell phone service for the area and high speed internet access within the City is offered by AT&T, Cox, and EarthLink. SDG&E provides electricity and natural gas.

Water, sewer, stormwater and drainage services and utility infrastructure are all sufficient to accommodate future growth and currently present little to no obstacles to future development within the Specific Plan area, except as it relates to water pressure supplied by Helix Water District. Future development will often require individual pump systems in order to provide appropriate water pressure unless Helix Water District provides a similar pump system to serve the downtown area to increase water pressure. In addition, the Sanitary Sewer Master Plan completed in August 2017, by Dexter Wilson Engineering, indicates that the Lemon Grove Sanitation District has approximately 5,000 EDUs of capacity remaining in the existing system. Over time, as the District improves its "Condition-

Based Assessment" and implements "Capacity-Based Improvements," additional capacity may be created. There are two sewer meter basins (LG1 and LG2) that have been identified with capacity issues: Broadway (CIP18), Broadway South (CIP8), and Downtown Village Specific Plan (CIP21). Without capital improvement program CIP pipeline replacements or repairs, these areas will be restricted in capacity. The Sewer Master Plan includes recommendations on prioritization for the aforementioned system improvements.

There are no constraints to development due to existing conditions within the downtown stormwater systems, as revitalization or reuse would occur over land that has been previously developed or disturbed. However, according to the 2017 Downtown Village Specific Plan Expansion Baseline Opportunities and Constraints Analysis, six locations within the Specific Plan area are experiencing drainage deficiencies and should be monitored and/or improved if these deficiencies continue or are exacerbated. The six locations include:

- Lemon Grove Avenue at Broadway to Hilltop Drive: 30 inch (in) CMP at 1,190 feet (ft.)
- Lemon Grove Avenue at Massachusetts Avenue to Beryl St: 72 in RCP at 1,940 ft.
- Broadway and Massachusetts Avenue: 30 in RCP at 100 ft.
- Broadway and Massachusetts Avenue to north of Broadway at Citrus Street: 30 in CMP at 750 ft.
- North of Broadway at Citrus Street to Harris Street: 48/30 in CMP at 430 ft.
- North of Broadway at Harris Street to West Street: 48 in CMP at 300 ft.

PUBLIC SAFETY: The cities of Lemon Grove, La Mesa, and El Cajon co-manage all fire and emergency medical services provided throughout the three cities. This joint powers authority, known as Heartland Fire and Rescue, replaced the Lemon Grove Fire Department. In addition, the City contracts with the County of San Diego Sheriff's Department for law enforcement services. Providing a safe, well-lit urban environment for residents and visitors to shop, eat and socialize are critical elements to the revitalization of downtown Lemon Grove. While current Fire Department and County of San Diego Sheriff's Department staffing levels are adequate to meet response time standards for the City, the local Department will likely be strained by an increase in population and development. Both Fire Department and Law enforcement staff located within the City of Lemon Grove Substation have expressed concerns that additional staffing and equipment may be necessary in order to meet the service call demands associated with the anticipated development increase. It is worth noting that Heartland Fire and Rescue has achieved an Insurance Service Organization (ISO) 1 classification, the highest level achievable. ISO evaluates many components of the community's fire defense system including response time standards, apparatus, equipment, water supply, training, dispatch, etc. These components must be protected in order to maintain the ISO Class I rating or it will degrade over time with unmitigated development.

ENVIRONMENTAL ISSUES: The Specific Plan area is a highly developed urban environment with minimal natural open space. Most, if not all land within the Specific Plan area is previously disturbed by human development. Historic and cultural resources within the Specific Plan area are limited to seven historic sites and there are opportunities to allow for either the preservation or demolition of these sites. There are no known hazardous materials sites within the DVSPE area, however, there are 108 locations (containing a total of 155 businesses) within the DVSPE area that have received a Unified Program Facility Permit from the Department of Environmental Health, which allows these facilities to

handle, store, treat, or generate hazardous materials, generate or treat medical waste, or own or operate an underground storage tank.

Environmental concerns related to biological resources, cultural resources, geologic conditions and hazardous materials are insignificant and mitigation will occur as necessary. Tribal consultations are required as a part of most development and grading monitoring will likely be required as a part of soil disturbance. Road diets on Broadway east of the trolley line have been analyzed and with increased density, traffic is projected to still operate at an acceptable level of service.

MARKET AND ECONOMIC ANALYSIS: The market and economic analysis conducted includes an assessment of residential, retail and office needs based on regional and local trends. Market rate housing is a critical driver in attracting desirable land uses for Lemon Grove (e.g., hoteliers, entertainment venues, family restaurants, breweries, etc.) contributing to local spending for retail, dining and services. Based on permit records within the Specific Plan area over the last 12 years, only areas that were rezoned to five stories or more received interest resulting in redevelopment. In sum, over 3 acres were redeveloped, with 220 new dwelling units over the last four years. No redevelopment occurred in areas only allowing three story building heights.

Residential housing development within the Specific Plan area, such as multi-family housing near retail, services and transportation amenities would serve to support an expansion of commercial and office development within the City. Retail locations within the Specific Plan area are mostly concentrated along Broadway, between Massachusetts Ave and Grove Street. The City should maintain and preserve their existing strengths as a supplier of affordable merchandise and clothing, while trying to attract new non-competitive tenants in the areas of food and beverage supplies, building materials, and gardening equipment, among others.

A critical element to the City's sustainability and economic viability is addressing the jobs-housing imbalance. The jobs-housing balance is a concept that illustrates the ratio relationship between the number of jobs and the number of resident workers in a city. Research indicates that benefits typically attributed to jobs-housing balance are: reduced driving and congestion, lower costs to businesses and commuters, lower public expenditures on facilities and services, greater family stability and higher quality of life.

There are limited opportunities for high quality office development in the near term, so the City should focus on attracting smaller professional office users (e.g. finance, real estate, family medical, corporate services) as opportunities arise. Generally, there are few employment industries in the City and additional employment centers are needed for Lemon Grove to be consistent with regional averages. Continuing to attract industrial uses with a retail component like breweries will help increase the employment base. The San Diego region has seen continued demand for housing and job opportunities in existing urbanized areas and Lemon Grove is no exception. In the long term, providing a community identity (a sense of place), well maintained infrastructure and creating a regional destination will help attract family oriented businesses, entertainment uses and professional offices and hotels.

3.0 VISION, GOALS, OBJECTIVES, AND POLICIES

3.1 INTRODUCTION

This chapter describes the vision, goals, objectives, and policies that guide subsequent sections of the Specific Plan including allowed land uses, development standards, design regulations, and implementation strategies consistent with the City's General Plan. These Specific Plan requirements supersede the policies of the General Plan and requirements of the City of Lemon Grove's Municipal Code. If there is a conflict between the policies in the General Plan or the regulations provided in the City's Municipal Code and the Specific Plan policies and regulations, the policies provided in this chapter shall prevail. Where direction is not provided in this Specific Plan, the provisions of the City's Municipal Code shall prevail.

The significance of this chapter is two-fold. First, it presents the City's vision about how downtown Lemon Grove should be in the future. Second, this chapter presents a series of goals, objectives and associated policies, which direct the City on specific actions to take to realize the vision for the area.

3.2 THE VISION

Imagine downtown Lemon Grove as a vibrant sustainable urban center that serves both the residents and the region. It includes a series of neighborhoods developed to provide a balanced mix of housing options, shopping and entertainment choices, and employment opportunities. New development, which integrates landscape, shade trees, parks, open space, art and history, will help to create an inviting atmosphere for pedestrians to stroll through downtown's attractive and well-lit streets. Downtown Lemon Grove provides inviting public places that build on the unique small town character of the City.

The preceding vision statement for downtown Lemon Grove is a product of the planning process outlined in Chapter 1 and builds upon the vision for downtown in the 2005 DVSP. While this Specific Plan provides a foundation for achieving this vision, the Plan cannot implement itself. Making the vision a reality and achieving all that Downtown Lemon Grove should offer requires the cooperation of many stakeholders, sometimes with a variety of different interests, working together towards a common goal. It is through the cooperation and dedication of people that this Specific Plan will come to life and the future vision will be achieved.

3.3 GOALS, OBJECTIVES AND POLICIES

The following goals for this Specific Plan provide the foundation of the regulatory framework that is implemented through the land use plan, zoning regulations, development standards, and design criteria.

A ***GOAL*** is a broad statement characterizing an ideal future outcome for the City. A goal is a general expression of community values and, therefore, may be abstract in nature. Consequently, a goal is generally not quantifiable or time-dependent.

An ***OBJECTIVE*** is a specified end, condition, or state that is a step toward attaining a goal. It should be achievable and, when possible, measurable. An objective may pertain to one particular aspect of a goal or it may be one of several successive steps toward goal achievement. Consequently, there may be more than one objective for each goal.

A ***POLICY*** is a specific statement that guides decision-making. It indicates a commitment of the City to a particular course of action. A policy is based on, and helps implement, a general plan's vision.

If a question arises regarding the intent of any implementing policy, the corresponding goals and overall vision should be examined to determine the purpose of the action.

GOAL (1): Develop a Vibrant Downtown

OBJECTIVE (1): Create a vibrant and dynamic downtown district that is visually attractive and creates a unique regional identity for Lemon Grove.

POLICIES:

1. Encourage a series of planning areas, or districts, that work together to establish a positive identity for Downtown. Include an art overlay area, historic district, and downtown district each with their own unique identities and opportunities to live, work, and play in an urban environment.
2. Maintain land use zoning regulations that create a mix of opportunities for residential, office, retail, entertainment, tourist, hotel, conference, employment and other desired uses.
3. Require context appropriate architectural styles for buildings within the Specific Plan area.
4. Create a strong sense of identity for the downtown through landscaping and streetscape enhancements, storefront improvements, and the establishment of a comprehensive signage system comprised of informational, directional, monument and gateway signs that are architecturally compatible with the character of the proposed neighborhoods.
5. Gateway and wayfinding signs and lighting shall be utilized as a unifying element with the both the entire Downtown Specific Plan area and with each Planning Area through colors and/or symbols.
6. Provide development incentives, such as additional building height, density and reduced parking or development standards for projects that contribute excess public improvements that help achieve the desired vision for downtown.
7. Encourage the use of art to enhance public areas and require art for new development within the Art Overlay areas.
8. Require ample plants and large shade trees to reduce heat and create pleasurable urban spaces.
9. Require a pocket park/parkette or open space for new development.
10. The City shall encourage local establishment of new businesses through by-right zoning offering high-quality jobs to allow residents to work locally and avoid excessive commutes.

GOAL (2): Create a Pedestrian-Oriented Environment

OBJECTIVE (2): Foster the creation of a pedestrian-friendly environment with amenities and activities.

POLICIES:

1. Create a pedestrian oriented environment that attracts local and non-local visitors to experience an atmosphere that is entertaining and vibrant with activity and provides for neighborhoods with unique character.
2. Establish a land use pattern that provides a variety of pedestrian oriented uses within walking distance of the Trolley.

3. Require infill development to be redeveloped in a visually attractive and pedestrian-friendly way with higher residential densities in key locations that support downtown non-residential uses.
4. Design and operate complete streets that enable safe, comfortable, and attractive access and travel for pedestrians, bicyclists, motorists, and transit users.
5. Include complete streets considerations in the design of all circulation improvement projects. These new design considerations include, but are not limited to, the following:
    - Landscaping (trees, medians, key intersections and gateways) that uses drought-resistant plant species, whenever possible, to conserve water, but emphasizes shade and reducing heat;
    - Minimized vehicular driveway ingress and egress points and expanded use of alleyways;
    - Expanded public transit facilities and improvements;
    - Increased safety criteria such as lighting and traffic calming devices;
    - Expanded signage (including commercial signs, street signs, entry signs, directional signs);
    - Expanded street furniture, but limiting sleeping areas;
    - Sidewalk widening; and
    - On and off-street parking management (e.g., metered and paid parking).
6. Support a road diet along Broadway, between Lemon Grove Avenue and Washington Street, to expand the outdoor retail shopping corridor.
7. Require pedestrian-oriented, ground-floor retail and restaurant uses that reinforce and expand downtown Lemon Grove's unique character catering towards families and professionals.
8. Encourage outdoor dining and beer and wine establishments to create a bustling dining atmosphere that brings the City "alive after 5."
9. Allow and encourage outdoor shopping kiosks, events, performances and live music. Consider providing recurring visual arts, education and/or cultural events that promote audience participation, learning and the exchange of ideas and allow for street closures and booths, music and food in the Main Street Promenade and along Main Street and Broadway. Consider providing a recurring music and visual arts street fairs and/or supporting community stakeholders in hosting successful community events. Continue to provide the annual community bonfire.
10. Establish a reasonable noise level for indoor and outdoor entertainment.
11. Identify performance standards to reduce potential noise, traffic, odor and other environmental impacts.
12. Encourage safe, comfortable and convenient pedestrian crossing options complete with enhanced landscaping, lighting, public art, and street amenities and furniture that improve walkability and pedestrian connections.
13. Activate the area by day, night, and weekends.
14. Limit uses that do not contribute to the pedestrian environment.
15. Continue to allow for dog parks.
16. Provide pedestrian scale lighting within pedestrian corridors and parking areas.

GOAL (3): Develop a Thriving Transit-Oriented Development Environment

OBJECTIVE (3): Encourage a concentrated, transit-oriented downtown core around a safe and attractive transit station with opportunities for increased densities and the implementation of SANDAG smart growth development ideals.

POLICIES:

1. Create a mix of building types and core uses that have a direct relationship and connectivity to transit.
2. Allow for residential, retail, employment, hotel, conference, and entertainment densities to be developed near transit locations, but restrict housing in innovation areas.
3. Allow for makers type businesses with a retail component fronting collector and major streets (e.g., automobile service, contractor and industrial uses).
4. Incentivize retail, restaurant and hotel businesses to locate near the transit station.
5. Encourage the use of transit-oriented development principles for new development.
6. The City shall undertake an aggressive program to encourage Lemon Grove commuters to utilize alternative transportation modes. The City shall publicize transit services including the location of transit centers and park-and-ride lots in the City newsletter and at public facilities. The City shall provide transit information at Lemon Grove City Hall for the purposes of displaying and distribution of transit maps and schedules, bike route maps and carpool promotional materials.

GOAL (4): Develop Balanced Parking Options

OBJECTIVE (4): Encourage a balanced parking supply to support the viability of commercial district businesses while minimizing impacts on adjacent neighborhoods.

POLICIES:

1. Reduce parking standards (e.g., fewer required parking spaces) for development within ¼ mile of the Trolley station within the Specific Plan area.
2. Pursue parking agreements with owners of underutilized commercial parking lots to provide public parking and explore the formation of future parking districts.
3. Provide incentives for developers and business owners that do not designate parking for a specific use.
4. Use signage to direct vehicles to appropriate and convenient parking for their specific destination or activity.
5. Create a program to fund parking from downtown redevelopment projects that are unable to provide required parking on-site to provide additional public parking nearby.
6. Consider metered and paid parking as parking demands increase.
7. Provide options and facilities for alternative transportation modes (e.g., car chargers, ride share, loading areas, bike and scooter share, etc.).
8. Eliminate parking overlays and reduce parking requirements if parking is adequate in the Specific Plan area due to decreased demand and/or new technologies (e.g., autonomous vehicles).

GOAL (5): Utilize sustainable development principles for new development

OBJECTIVE (5): Create a downtown that is developed with sustainable design principles to meet the needs of the present without compromising the ability of future generations to meet their own needs.

POLICIES:

1. Support achievement benchmarks in green building such as the Leadership in Energy and Environmental Design (LEED) certification.
2. Maintain programs that encourage project designs that reduce construction debris and building materials in the landfills.
3. Encourage project designs that achieve lower operating and maintenance costs while providing a comfortable environment for the occupants.
4. Enforce low impact development standards such as green roofs, bioretention/biofiltration. Low impact development is a term used to describe a design approach to manage stormwater runoff and emphasizes conservation and use of on-site natural features to protect water quality.
5. Strive for jobs/housing balances City-wide consistent with regional averages by zoning for employment centers.
6. Implement green streets and require minimum planting, tree, park and open space requirements and promote solar energy installations to reduce greenhouse gas emissions.
7. Prioritize walking and biking over vehicles with development decisions.
8. Encourage project designs that have little or no impact to water quality.
9. Maintain minimum sustainable practices for development.
10. Encourage the implementation of new sustainable technologies.
11. Promote social equity so that all groups enjoy the benefits of a healthy and prosperous community, with access to housing, transportation, jobs and commerce.
12. Park space shall be provided for new development including land and improvements at a rate of 1.5 acres per 1,000 residents. Estimate one resident per studio dwelling unit plus one resident per bedroom.
13. Require new development, especially housing units, to fund their fair share of street and infrastructure improvements of the downtown. Include adjacent intersection improvements based on percentage of street frontage.
14. Require new development to fund their fair share for 50 year maintenance and safety personnel and infrastructure costs in areas zoned for high densities and intensities.
15. Require new development to fund their fair share of gateway and wayfinding signage based on percentage of street frontage of the downtown area.

GOAL (6): Promote Economic Development

OBJECTIVE (6): Establish a long term, sustainable and economically viable environment for business and property owners.

POLICIES:

1. Encourage a diverse retail environment with an appropriate mix of retail, office, residential, dining, entertainment and art uses.

2. Promote retention of existing businesses and recruitment of desirable businesses.
3. Encourage and support local businesses through low fees, expedited processing and flexible development standards.
4. Prioritize family and professional oriented local niche businesses through zoning and the permitting process.
5. Encourage and support family and professional oriented niche businesses unique to the region.
6. Increase the downtown population to support existing and new businesses through high density housing, employment, entertainment, and tourist centers within walking distance of the Main Street Trolley Station.
7. Encourage and support the formation of a Business Improvement District (BID), a Property Based Improvement District (PBID) and/or a Community Facilities District (CFD) to support maintenance, improvements and activities in the downtown.
8. Develop funding or saving mechanisms, where appropriate and feasible, to implement public improvements and business-improvement activities.
9. Continue to prioritize street and park infrastructure improvements in the downtown as a part of a five-year downtown capital improvement program (DCIP).
10. Implement a well-coordinated maintenance program for sidewalks, streets, and landscaping.
11. Continue to support Planning Areas that provide for unique architecture character and land uses in the downtown to accommodate all aspects of people's lives including, work, housing, shopping, recreation, education and culture.
12. Support new land uses consistent with the vision of the downtown that serve as regional destinations to attract tourism.
13. Encourage and support additional and improved connections to State Route 94.
14. Encourage breweries, brewpubs, wineries and distilleries to attract tourism and employment.
15. Develop and implement park programs (activities and amenities) to energize existing and proposed public parks in the downtown.
16. Encourage and support short and long term parklets in the public right-of-way to encourage outdoor activities.
17. Encourage retail storefronts to be inviting and largely transparent along all collector and major streets. Land uses with pedestrian orientation providing services to downtown visitors may be a part.
18. Encourage and support designs and locations for gateways, wayfinding and district identifying signs in the downtown.
19. Allow for, and encourage art and unique attractions in the downtown consistent with the vision for the downtown.
20. Require art components and a variety of retailers and supporting art services in the art district.
21. Allow for and encourage temporary uses (e.g., seating, outdoor dipslays, art, etc.).
22. Establish design guidelines for public infrastructure improvements within the Art, Historic and Downtown Districts.
23. Encourage Helix Water District (HWD) to upgrade their water service infrastructure to eliminate requirements for new developments to have individual pump systems, which is a considerable cost for new developments. Alternatives could be HWD reducing meter fees or rates for a certain time period to reimburse developers for

costs to install pump systems to ensure appropriate water pressure is provided. These pump systems are a considerable cost burden on developers. A minimum 100 psi is recommended.

GOAL (7): Create Mobility Options

OBJECTIVE (7): Obtain a level of mobility for all modes of transportation that furthers economic development, convenience, safety and choice for residents, visitors, and the business community.

POLICIES:

1. Create an Integrated Transit Center in cooperation with the Metropolitan Transit System (MTS).
2. Support funding opportunities with MTS for creating grade-separated crossings for the Trolley at Central Avenue, Broadway and Lemon Grove Avenue.
3. Reduce the number of vehicle trips and congestion through better management of parking supply, public transit improvements, complete streets, and roadway improvements.
4. When pedestrian/vehicular/cyclist conflicts require compromise, favor the pedestrian and cyclists.
5. Create safe pleasant walking and biking corridors with associated amenities and lighting in the downtown.
6. Plan for a roundabout at the intersections of Lemon Grove Way and Grove Street.
7. Explore the feasibility of allowing skateboarding within the downtown as a mode of transportation.
8. Support bike and associated motorized and non-motorized ride-share options with consideration to public safety.
9. Where feasible, provide complete streets utilizing existing street right-of-way widths.
10. Support areas for loading and unloading that reduce parking demands.
11. The City shall improve local roads according to this Specific Plan as needed to maintain efficient traffic flow.
12. City staff should obtain estimates for level of services as available by SANDAG and comprehensively review this Specific Plan circulation network every five years to analyze estimated LOS and projected LOS to see if there are discrepancies. If LOS is lower than anticipated, traffic analysis shall be a part of all new development projects where increased FAR or dwelling units are a part with appropriate mitigation included.

GOAL (8): Develop a Safe Community Atmosphere

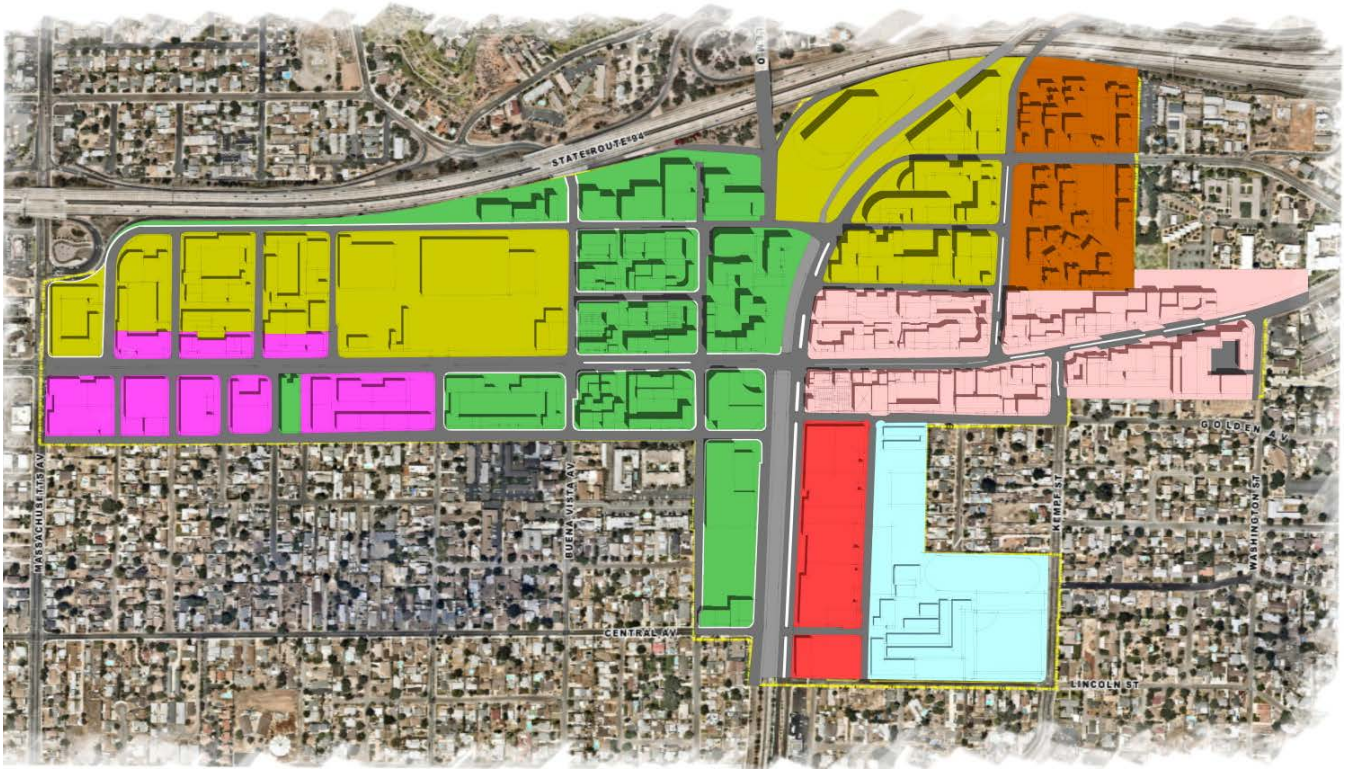
OBJECTIVE (8): Create a safe environment established through neighborhood policing and high-quality design methods which consider defensible spaces.

POLICIES:

1. Incorporate Crime Prevention Through Environmental Design (CPTED) principles into design guidelines subject to review and approval by Planning staff and the Sheriff's Crime Prevention Specialist.

2. Implement CPTED strategies that address lighting, security hardware, street and building access control, visibility, and landscaping.
3. Provide pedestrian scale lighting along pedestrian and parking corridors.
4. Encourage volunteerism to maintain, improve and monitor the downtown.
5. Maintain public streets and parks and require property owners to maintain their properties in a high-quality manner.
6. Encourage coordination between community leaders, Sheriff's Department, and the City to foster safe and healthy downtown area.

4.0 LAND USE PLAN



4.1 PURPOSE

The purpose of the Land Use Plan is to designate planning areas (also referred to as land use designations), zoning districts and regulations (e.g., density/intensity, number of stories, setbacks, massing, signage, parking, allowable uses), and overlays providing requirements and guidance for how the public and private land is used and constructed to implement the vision, goals, objectives and policies of the Specific Plan. These Specific Plan requirements supersede the requirements of the City of Lemon Grove's Municipal Code and the land use designations and related policies in the General Plan. If there is a conflict between the regulations provided in the City's Municipal Code or the land use designations and policies in the General Plan, then the Specific Plan's Land Use Plan, the regulations provided in this chapter, shall prevail. Where direction is not provided in this Specific Plan, the provisions of the City's Municipal Code shall prevail. See Chapter 1, Section 1.2 (Legal Authority), for further clarification.

4.2 EXPANDED VISION

The Land Use Plan identifies a series of neighborhoods each with their own unique themes and architectural design standards developed to provide a balanced mix of housing options, shopping and entertainment choices, and employment opportunities. New development, which integrates landscaping, shade trees, parks, open space, art and history, will help create an appealing atmosphere and invite pedestrians to stroll through downtown's attractive and well-lit streets and wide sidewalks. Downtown Lemon Grove provides pleasant public places that build on the unique small town charm of the City. Outdoor amenities and business and community events will create a lively pedestrian oriented environment as a central focus throughout the downtown.

4.3 FORM BASED CODE

This chapter constitutes the primary development standards for the Specific Plan area with an emphasis on form based codes (FBCs). The emphasis on design allows uses to evolve as the market changes. FBCs primarily control physical form (e.g. character, streetscapes, intensity, density and types of uses) and allow for greater flexibility in land use. The design of buildings, streetscapes, and civic infrastructure are the central focus.

4.4 DEFINITIONS

This section provides definitions of terms and phrases used in this Chapter and include the following:

- **Build-to line:** The line at which construction of a building facade is required to occur on a lot, running parallel to the property lines that abut streets, to ensure a more uniform building façade line on the street.
- **Mixed Use Development:** A development project that blends a combination of uses that are physically and functionally integrated.
- **Overlay:** This is a tool that identifies special provisions in addition to those in the underlying zoning district. Regulations or incentives are attached to the overlay district to protect a specific resource or guide development within a special area.
- **Planning Area:** A geographical sub-region of the Downtown Specific Plan with distinct organizing themes.
- **Street Frontage:** The area between a property line and the centerline of a public street and/or alley.
- **Zoning District:** Includes regulations and standards that govern land use and building bulk that help to implement the vision of the Planning Areas.

4.5 LANGUAGE

In interpreting this Specific Plan, it is understood that "**shall**" or "**must**" is mandatory, and "**should**" and "**may**" are permissive.

4.6 ESTABLISHMENT OF PLANNING AREAS, ZONING DISTRICTS AND OVERLAYS

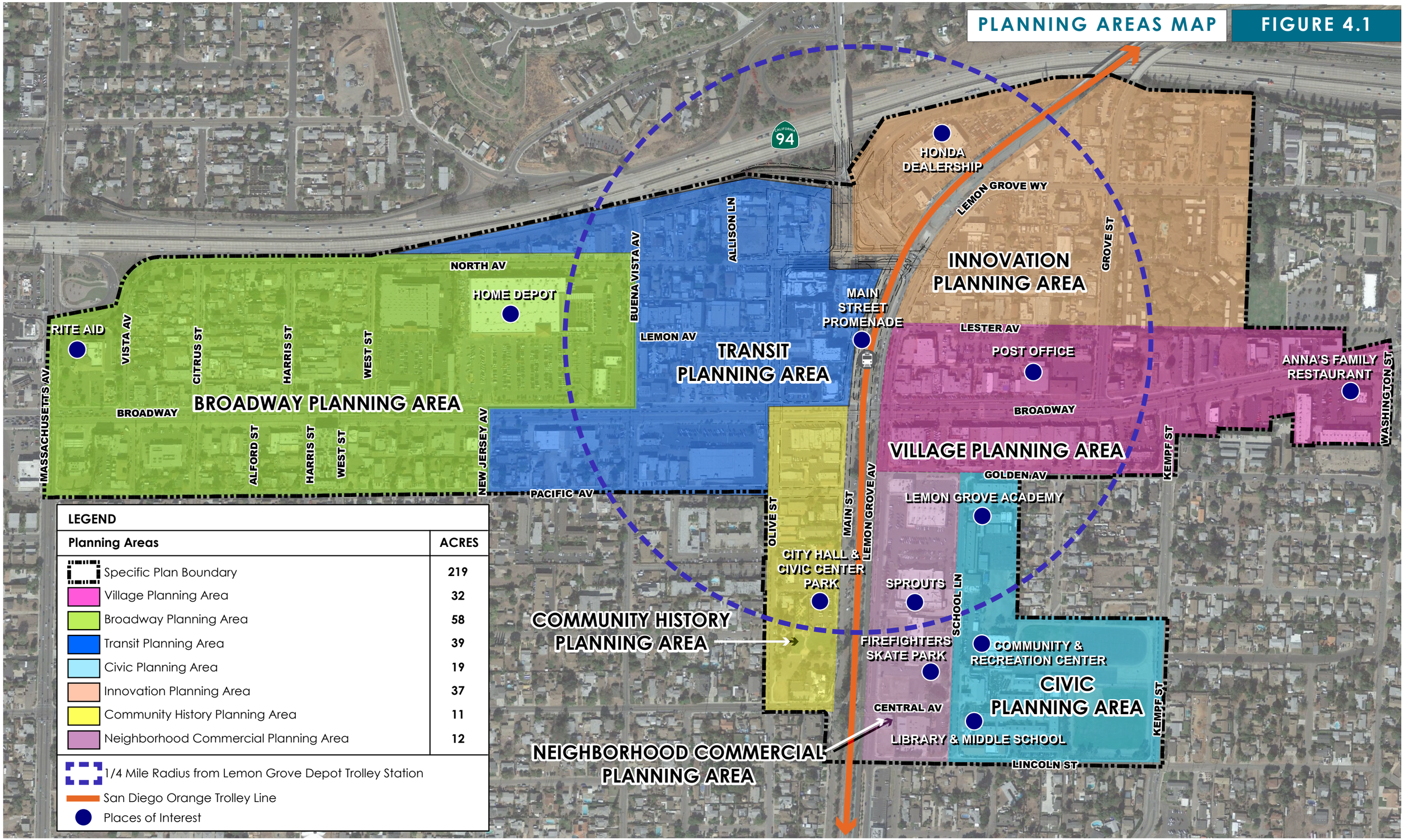
To implement the vision of the Specific Plan, seven Planning Areas, seven Zoning Districts and ten overlays are hereby established.

4.7 DESCRIPTIONS OF PLANNING AREAS

The Specific Plan is intended to support the development of a Downtown atmosphere for the City. Seven Planning Areas, also known as land use designations, have been identified within the footprint of the Specific Plan as shown on **Figure 4.1 (Planning Areas Map)**. Each Planning Area is distinct with specific organizing themes intended to work together to reinforce the success of a downtown environment. This Plan supersedes the City of Lemon Grove's General Plan Land Use Map for the Specific Plan area, except as it relates to the Connect Main Street project. The vision for each Planning Area is described below.

PLANNING AREAS MAP

FIGURE 4.1



LEGEND

Planning Areas	ACRES
Specific Plan Boundary	219
Village Planning Area	32
Broadway Planning Area	58
Transit Planning Area	39
Civic Planning Area	19
Innovation Planning Area	37
Community History Planning Area	11
Neighborhood Commercial Planning Area	12

1/4 Mile Radius from Lemon Grove Depot Trolley Station

San Diego Orange Trolley Line

Places of Interest

VILLAGE PLANNING AREA

The intent of the Village Planning Area is to enhance and preserve Lemon Grove's "small town" business district, while unifying and expanding retail commercial, residential and office uses along Broadway and portions of Lemon Grove Avenue. Broadway will be supported as the City's "main street." Specialty retail and service uses shall be pedestrian-oriented and are intended to serve the local community. Outdoor eateries, entertainment and retail uses including temporary events and street closures between Lemon Grove Avenue and Grove Street shall be encouraged. Pedestrian amenities will be encouraged to focus shoppers' attention towards shops and stores. This includes the creation of a public plaza and linear park along Broadway which will develop a unique gathering area for the community and region.

BROADWAY PLANNING AREA

The Broadway Planning Area offers an opportunity to create a mixed-use corridor that is fully served by transit and freeway connections. The vision for this area will be a pedestrian oriented corridor that integrates traditional retail commercial with entertainment, employment, educational and limited residential uses serving the community and region. A special focus will be on expanded pedestrian lighting, sidewalks, landscaping and benches integrated with eclectic architecture and public art and pocket parks. Storefronts will be encouraged along Broadway.

TRANSIT PLANNING AREA

This area allows a mixture of both commercial uses (e.g. retail, office, and entertainment) and high density residential uses oriented to the Lemon Grove Trolley Depot located at Broadway and Lemon Grove Avenue. The contemporary commercial and residential uses would complement each other and benefit from the proximity to public transit. A special focus on tinkers and makers, arts, entertainment and programs and features unique to Lemon Grove will be a part of this area in order to create a lively eclectic cultural experience.

CIVIC PLANNING AREA

The Civic Center Planning Area is intended to accommodate the various governmental services, schools, libraries, parks and public amenities used by the residents of Lemon Grove retaining the City's "small town" feel. Accessibility to and within the area should be maintained or enhanced with the inclusion of landscaped open spaces available for public use. This area shall also include improvements along School Lane that feature elements such as landscape and hardscape treatments.

INNOVATION PLANNING AREA

The Innovation Planning Area is intended to provide modern redevelopment opportunities that bring employment based production, offices, professional services, retail, colleges, civic uses and tourist attractions. It would foster tinkers and makers, art and innovative commercial and light industrial uses. Campuses will be created with connections to the public transit and nearby retail.

COMMUNITY HISTORY PLANNING AREA

The Community History Planning Area is intended to provide a mix of commercial, office, residential and civic uses while preserving Lemon Grove's history. The area will require the preservation or restoration of historic buildings and landmarks. Identification signs will be required on historic buildings and landmarks. Exterior improvements will be consistent with the early pioneer period (see Connect Main Street project – Special Treatment Area (STA) IX) or incorporate historic elements that celebrate the City of Lemon Grove's history. Architecture will be required to be historic in nature.

Buildings along Main Street must be compatible with the adopted Connect Main Street concept (STA IX).

NEIGHBORHOOD COMMERCIAL PLANNING AREA

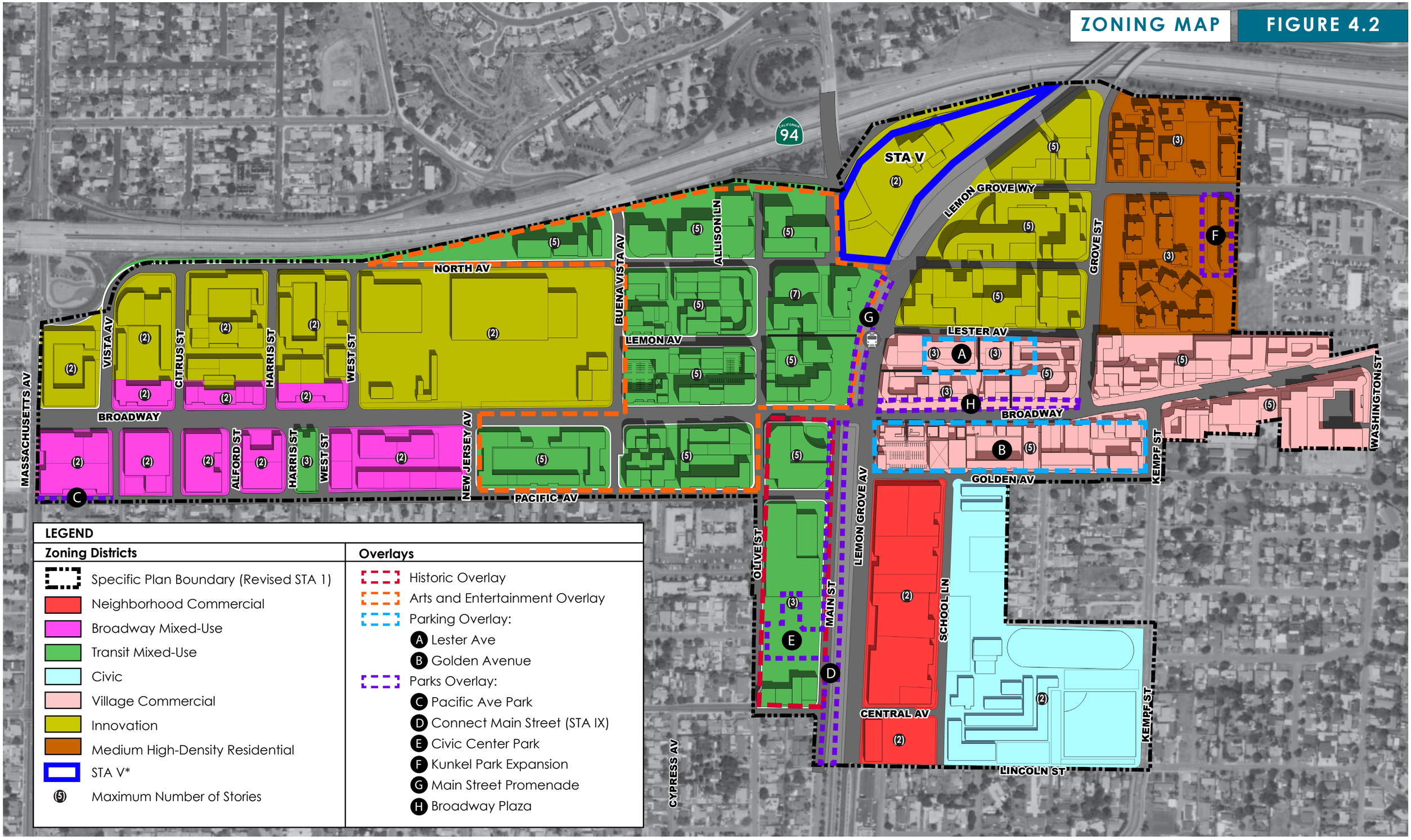
The Neighborhood Commercial Planning Area is intended for lower density neighborhood serving commercial. This area helps retain the City's "small town" community feel and provides a transition between single-family residential uses and the higher density portions of downtown.

4.8 DESCRIPTIONS OF ZONING DISTRICTS AND OVERLAYS

The location of the Zoning Districts and Overlays are depicted on **Figure 4.2 (Zoning Map)**. The Zoning Districts and Overlays help to implement the vision of the Planning Areas. A brief description of each Zoning District and Overlay is provided below. This Plan supersedes the City of Lemon Grove's Zoning Map for the Specific Plan area, except as it relates to the Connect Main Street project.

ZONING MAP

FIGURE 4.2



LEGEND

Zoning Districts	Overlays
Specific Plan Boundary (Revised STA 1)	Historic Overlay
Neighborhood Commercial	Arts and Entertainment Overlay
Broadway Mixed-Use	Parking Overlay:
Transit Mixed-Use	A Lester Ave
Civic	B Golden Avenue
Village Commercial	Parks Overlay:
Innovation	C Pacific Ave Park
Medium High-Density Residential	D Connect Main Street (STA IX)
STA V*	E Civic Center Park
(5) Maximum Number of Stories	F Kunkel Park Expansion
	G Main Street Promenade
	H Broadway Plaza

*STA V is a part of the Innovation Zoning District.

NEIGHBORHOOD COMMERCIAL ZONING DISTRICT

Allows for retail operations that are oriented toward families and business professionals providing a broad range of goods and services, catering to surrounding single-family residents and local customers, such as restaurants, banks and accounting offices.

BROADWAY MIXED-USE ZONING DISTRICT

Allows for a variety of land uses including retail sales and services, professional and corporate offices, hotels, restaurants, and multi-family residences above retail uses in a pedestrian oriented corridor with the intent of creating a retail service area for the community. Vehicular centric and drive-through uses are permissible provided storefronts are along pedestrian pathways. Additional density may be allowed for the provision of Affordable Housing and/or Community benefits, such as areas for public parking, parks, plazas and art.

VILLAGE COMMERCIAL ZONING DISTRICT

Allows for a mixture of commercial and residential development that serves the community with the intent of creating a lively pedestrian-oriented shopping and restaurant area. Retail sales and services and/or restaurants are to be located on the ground floor. Hotel, office, and/or residential uses are to be located above or behind retail. Exterior building improvements and architecture will promote the City's history and small town feel. Connections to parking and civic and transit land uses will be required. Outdoor amenities and activities including live music and performances will be permitted.

TRANSIT MIXED USE ZONING DISTRICT

Allows for a mix of pedestrian oriented retail commercial, civic, entertainment, office and residential development that take advantage of the convenient access to the nearby bus and trolley transit services with the intent of creating a modern lively entertaining and cultural experience for visitors and the community. Retail commercial uses such as restaurants, brewpubs, breweries, theatres and retailers located at ground level will provide goods and services for both residents and commuters. Ground floor uses along front property line shall be devoted to retail sales and services along collector streets and major roads. Outdoor pedestrian amenities and activities including live music and performances will be permitted.

CIVIC ZONING DISTRICT

Allows for public uses and service facilities, such as government offices and facilities, parks/recreational facilities, post office, libraries, schools and fire and law enforcement stations. Uses compatible with a civic nature, such as a community/conference center, may also be allowed. Outdoor pedestrian amenities and activities including live music and performances will be permitted.

INNOVATION ZONING DISTRICT

Allows a wide range of employment uses, hotels and conference centers, professional and corporate offices, contractor's offices, medical and higher education facilities, automobile sales and service, wholesale and manufacturing businesses, research and development, and high technology production are permitted with the intent of creating a lively pedestrian-oriented employment district with individual campuses including open space. Retail uses including retail sales and service uses, galleries, restaurants, brewpubs, and breweries are also permitted and encouraged on the ground floor of collector streets. Outdoor pedestrian amenities and activities including live music and performances will be permitted.

MEDIUM /HIGH DENSITY RESIDENTIAL ZONING DISTRICT

Allows for duplexes, town-houses, condominiums and apartments. Typical uses include accessory dwelling units, churches, day care centers, open space, public facilities, home businesses and others which are compatible with the surrounding neighborhood.

HISTORIC OVERLAY

The area includes a number of historic buildings and landmarks, City Hall, the Sheriff substation and Civic Center Park. Exterior improvements along Olive Street will require an Early Pioneer period theme consistent with the Connect Main Street project as described in the General Plan (STA IX). New development shall incorporate historic elements into building designs, art and murals, and exterior features and amenities that celebrate the City of Lemon Grove's history and/or the early pioneer time period. Outdoor pedestrian amenities and activities including live music and performances will be permitted.

ARTS AND ENTERTAINMENT OVERLAY

This overlay promotes art and artist housing, retail and manufacturing operations (makers). Live-work units or artist lofts may also be allowed through this overlay. Examples of uses to be encouraged include: art galleries, automobile restoration, furniture manufacturing with a retail showroom and/or ceramics production with accompanying retail sales. Art features and theatrical and/or artistic signage and displays shall be required within the public street frontage and within private areas visible from the public right-of-way.

PARK OVERLAYS

There are six park overlays within the Downtown Specific Plan area: 1) Pacific Avenue Park (between Massachusetts Avenue and Vista Avenue within the existing public right-of-way); 2) The Main Street Promenade; 3) Civic Center Park; 4) Connect Main Street (STA IX); 5) Broadway Plaza (between Lemon Grove Avenue and Grove Street); and 6) Kunkel Park expansion (8095 Lemon Grove Way). The following represents goals and a vision for each park. Public Parkland improvements shall be required and shall be based on land and improvements at a rate of 1.5 acres per 1,000 residents. Estimate one resident per studio dwelling unit plus one resident per bedroom.

Pacific Avenue Park Overlay

Provide a new neighborhood park that serves the needs of the surrounding community. The design should incorporate a tot lot, dog park, a botanical or community garden, and/or seating areas that take advantage of the topography for views, breezes and visibility. Public outreach to property owners within 500 feet of the park and to community stakeholders and a community workshop is recommended with implementation of a park design.

The Main Street Promenade Overlay

Provide a park that serves the needs of residents and regional visitors. This park is themed "where yesterday, today and tomorrow meet." This theme shall be retained and expanded upon. The goal is to attract families and professionals to the park area and allow for and encourage outdoor activities. Park programming should include retail kiosks, a café or a coffee kiosk with outdoor dining or tasting areas, shade structures over the tot lot area and /or amphitheater, an expanded amphitheater, an increased vertical themed tot lot with features and amenities, unique prominent interactive play structures and art features, public art, a dog park, artist and music venue areas and/or related programs. The park

would allow for bicycle and skateboarding rental, sharing and storage facilities and outdoor events including live music.

Civic Center Park Overlay
Provide a park that serves the needs of residents and regional visitors. This park design is established through the Connect Main Street (General Plan STA IX) project and is themed to be the early pioneer period. The goal is to attract families and professionals to the park area while retaining its historical significance. Park programming should include a pioneer themed tot lot in the area west of the parking lot, brick paths and a themed gateway sign from Olive Street, a community garden, a dog park, a gazebo with picnic tables, an elevated stage and event pavilion, a renovated community fire pit and fountain, park benches and additional shade trees and activity programs including outdoor events and live music. Future improvements are required to conform to the approved theme and conceptual drawings for Connect Main Street.

Connect Main Street (STA IX) Overlay
General Plan Special Treatment Area (STA) IX is an approximate two-mile-long linear corridor immediately west of the Orange Line of the MTS trolley system that runs along Main Street from Broadway to Massachusetts Avenue and then to the south end of the City through the Massachusetts Avenue Trolley Station and behind the residences on the east side of San Altos Place.

STA IX includes walking and biking paths and park related activity areas as described in the General Plan. Key segments in the corridor, such as the area between Broadway and Central Avenue, will have the potential for temporary full street closures for special community events provided appropriate access to nearby properties are retained. The project site includes six themes in a chronological arrangement that span the length of the two-mile corridor. The themes are an extension of the past, present, and future theme of the existing Main Street Promenade Park with a goal to go back in time from the 1900's to prehistoric times as you travel from the north end to the south end respectively. The theme between Broadway and Central Avenue is the Early Pioneer Period. Future improvements are required to conform to the approved theme and conceptual drawings. Thirty percent construction drawings are complete.

Broadway Plaza Overlay
Provide attractive open space for the adjacent retail shopping area on the north side of Broadway between Lemon Grove Avenue and Grove Street. Encourage outdoor eateries, entertainment and retail displays, kiosks and other uses. Allow for temporary events and street and parking lot closures. Provide pedestrian amenities and gathering places to focus shoppers' attention towards shops and stores.

Kunkel Park Expansion Overlay
Provide a neighborhood park that serves the needs of the surrounding community. Consider purchasing this property if available to expand Kunkel Park. Applicable land use, zoning, and development regulations shall apply to properties in the Kunkel Park without consideration of this Expansion Overlay. Public outreach to property owners within 500 feet of the park and to community stakeholders and a community workshop is recommended with implementation of an expanded park design for Kunkel Park if the property is acquired for park purposes.

PARKING OVERLAYS

There are two parking overlays within the Downtown Specific Plan area: 1) Lester Avenue Public Parking Lot; and 2) Golden Avenue Parking Corridor. The following represents goals and a vision for each parking overlay.

Lester Avenue Public Parking Lot Overlay

This overlay includes City-owned parking facilities. Should this area be converted to other uses, any public parking spaces lost must be replaced and located within 500 feet of the subject property.

Golden Avenue Parking Corridor Overlay

This overlay shall allow for greater than three stories if public parking is incorporated into the development at a rate of one additional unit per one public parking stall (density bonus). A maximum of five stories and 75 feet in height is permissible. A minimum of one public parking space per ten feet of frontage is required in order to utilize the height increase and density bonus. Diagonal parking shall be encouraged as a part of the final street design for Golden Avenue between Lemon Grove Avenue and Kempf Street.

4.9 ALLOWABLE LAND USE MATRIX

Table 4-1 establishes which land uses are permitted (P), permitted through an administrative zoning clearance (Z), conditionally permitted with discretionary review by the Planning Commission and public noticing (C), conditionally permitted with discretionary review by the Development Services Director (Director) with appeal rights to the Planning Commission and public noticing (M), or temporarily permitted uses (T) within each of the various Specific Plan zoning districts. Procedures and administration shall comply with Chapter 17.28 of the Municipal Code. Planned Development Permits in accordance with Section 17.28.030 of the Municipal Code shall only be required if a deviation from Specific Plan development standards or a major modification and/or demolition of a historic structure is proposed. Projects are otherwise exempt from Planned Development Permit requirements. Accessory uses not discussed are permitted provided the use is consistent with the purpose of the Specific Plan's Planning Areas and Zoning Districts at the discretion of the Development Services Director. The Lemon Grove Zoning Ordinance (Title 17 of the Municipal Code) is referenced for further explanation as applicable.

If a particular use is not listed, the Director shall determine if the proposed use is substantially similar in character and intensity to a listed use and if it is compatible with the purpose of the Zoning District and Planning Area and issue a zoning determination. Zoning determinations may be appealed to the Planning Commission. Such a use is subject to the permit process that governs the category in which it falls. When the Director determines that a proposed, but unlisted, use is similar to a listed use, the proposed use will be treated in the same manner as the listed use in determining where it is allowed, what permits are required, and what other standards and requirements of the Specific Plan apply. Unless the proposed use is determined to be similar to a listed use and compatible with the purpose of the Zoning District and Planning Area, it shall be a prohibited use. Prohibited uses do not have an identified or associated identifier in the matrix. All land use decisions shall be based on conformance with the vision, goals, objectives and policies and described planning areas in this Specific Plan.

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
ADMINISTRATIVE AND PROFESSIONAL OFFICES								
Retail Offices (retail service professional oriented offices such as, accounting, engineering, real estate and medicine coordinated by a State Licensed Professional)	P	P	P	P	P			
Employment Offices (non-retail offices for education, government, contractors, corporations, research and development and similar uses)	P	Z[5]	Z[5]		P		M	
Financial Institutions (bank, stock broker, etc., but excluding alternative financial services)	P	P	P	P	P			
Alternative Financial Services (pawn shops, cash for goods, payday loans, anticipatory loans, and auto title lending)								
EATING/DRINKING ESTABLISHMENTS								
Restaurants	P	P	P	P	P			Ch. 18.27
Bars/Nightclubs	C	C	C		C			Ch. 18.27
Brewpubs/Wine bars	Z	Z	Z	Z	Z			Ch. 1827
INDUSTRIAL & WAREHOUSING ESTABLISHMENTS								
Heavy Manufacturing (Uses that process, fabricate, assemble, treat, or package finished parts or products in compliance with Performance Standards; A retail component is permitted)		C			M			Section 17.24.080
Light Manufacturing (Uses that process, fabricate, assemble, treat, or package finished parts or products in compliance with Performance Standards; A retail component is required)	Z	Z	Z	Z	Z			Section 17.24.080
Personal Self Storage Facilities[5]	M	M[2]	M		M			Section 17.24.80
Public Utility Facilities	M	M	M	M	M	M	M	Section 17.24.080
Recycling Collection Facilities								Section 17.24.080
Recycling/Garbage Processing Facilities								Section 17.24.080
Vehicle Repair and Restoration	Z	Z[2]			Z			Section 17.24.080
Warehousing		M[2]			Z			Section 17.24.080
Wholesale Trade		M[2]			Z			Section 17.24.080
RETAIL SALES AND SERVICES								
Adult Entertainment								Ch. 18.28

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Animal Sales & Service	M	M	M	M	M			Ch. 18.16 and Section 17.24.080
Auditoriums/Conference/Meeting/ Entertainment/Recreation Facilities (Indoor)	M	M	M	M	M		M	Section 17.24.080
Auditorium/Entertainment/Recreation Facilities (Outdoor)	C	C	C		C		C	Section 17.24.080
Tourist Attractions		C			C			Section 17.24.080
Business Support (Uses that provide printing, copying, photographic, computer, or technological services)	P	P	P	P	P			
Day Care Center	M			M	M			
Equipment Rental with No Outdoor Storage	P	P	P	P	P			
Equipment Rental with Outdoor Storage					M			17.24.060
Funeral & Mortuary Services (without crematoria)	M				M			
General Merchandise (such as grocery, bakery, sporting goods, building supply, antiques, hobby, art, clothing, flowers)	P	P	P	P	P			
Hotel (interior access to rooms)	M	M	M	C	M			
Hookah Smoking Lounges		C[2]						
Kiosk, Stands & Carts – Outdoors		Z	Z					Section 17.24.060
Maintenance and Repair of Consumer Goods	Z	Z	Z	Z	Z			
Marijuana Dispensaries								Ch. 17.32
Liquor Stores	C							Ch. 18.27
In- or Outdoor Nursery (retail only)	M	C	C	M	M			
Personal Services (such as barber, beauty, professional massage/day spa, tanning, tailor, travel)	P	P	P	P	P			
Professional Studios & Galleries (such as art, dance, martial arts, music, writing, educational tutoring and instructional services open to the public)	P	P	P	P	P			
Retail – Antiques (High value collectibles produced fifty years before date of purchase)	P	P	P	P	P			
Retail – Second Hand Merchandise (restored or maintained in good condition)	M	M	M	M	M			
Smoke Shops								

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Tattoo and Body Piercing Studios		P[2]						
Theatre and Movie Theater (indoor)	M	M	M	M	M			
Theatre and Movie Theater (outdoor)		C	C		C		C	
Vehicle Equipment and Supplies without Installation	P	P		P	P			
Vehicle Fuel Station and Maintenance	P	C		C	M			Section 17.24.080
Vehicle Sales and Rentals	P	M[2]		M	M			Section 17.24.080
PUBLIC FACILITIES								
Library/Museum	M	M	M	M	M		M	
Parks/Community Gardens/Recreation	P	P	P	P	P	P	P	
Parking Lot or Structure	P	C	C	P	P	P	P	Section 17.24.060
Places of Worship (includes accessory schools, preschools, daycares, and recreation facilities)		C				C	C	
Public Safety Facilities	P	P	P	P	P	P	P	
Schools K-12 (Private or Public)							C	
Colleges and Universities	C	C		C	C		C	
RESIDENTIAL								
Emergency Homeless Shelters								
Multi-Family Housing	M[5,7]	M[4,7]	M[5,7]			C		
Residential Care Facilities								
ACCESSORY USES (less than 50% of floor area)								
Assembly Space	Z	M	M	Z	Z	Z	Z	Section 17.24.060
Loading & Unloading On-site	Z	Z	Z	Z	Z		Z	
Alcohol Sales and Consumption[6]	*	*	*	*	*			Ch. 18.28
Employee Convenience & Services	Z	Z	Z	Z	Z		Z	Section 17.24.060
Outdoor Dining	Z	Z	Z	Z	Z		Z	Section 17.24.060
Outdoor Display	Z	Z	Z	Z	Z			Section 17.24.060
Outdoor Sales (outside a retail storefront; includes walk up windows)	M	M	M	M	M			Section 17.24.060
Outdoor Storage of Equipment & Supplies	M	M			M			Section 17.24.060
Outdoor Storage of Vehicles (well maintained)	M	M[2]		M	M			Section 17.24.060
Outdoor Vending Machines (adjacent to storefront less than 10% of storefront)	Z	Z	Z	Z	Z			
Recycling/Donation Collection Facilities	C				C			
Recreational & Large Vehicle Storage					M			

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
* See Footnote

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Retail – Second Hand Merchandise	M	Z	M	M	Z			
Retail Manufacturing	Z	Z	Z	Z	Z			Section 17.24.060 and 17.24.080
Caretaker's Dwelling		M			M			Section 17.24.060
Catering (on or off-site)	Z	Z	Z	Z	Z			
Outdoor Entertainment & Live Music	C	C	C	C	C		C	
Indoor Entertainment & Live Music	Z	Z	Z	Z	Z		M	Sections 9.24.080(B) and 17.24.080
Parks, Open Space & Recreation	P	P	P	P	P	P	P	
Art (Murals, Sculptures, etc.)	Z	Z	Z	Z	Z	Z	Z	
Home Occupations[8]	Z	Z	Z	Z	Z	Z	Z	Chapter 18.20
Small Family Daycare	P	P	P			P		Section 17.24.060
Large Family Daycare						M		Section 17.24.060
Community Gardens/Agriculture	Z	Z	Z	Z	Z	Z	Z	Section 17.24.060 and 17.24.080
Communications Facilities	Z	Z	Z	Z	Z	Z	Z	Section 17.24.060 and 17.24.080
Vehicle Charging Stations	P	P	P	P	P	P	P	
Car and Ride Share Parking Spaces	P	P	P	P	P	P	P	
Heliport (rooftop)		M			M			
Residential Complex Support	Z	Z	Z			Z		Section 17.24.060
Recycling, Composting, and Trash receptacles	Z	Z	Z	Z	Z	Z	Z	
Bike and Skateboard Lockers and Storage Facilities	M	M	M	M	M	M	M	
Warehousing		M[2]			Z			
Wholesale Trade		M[2]			Z			
Drive Through with retail adjacent to public sidewalks	M	C	C	C	C			
TEMPORARY USES								
Mobile Food Trucks		T	T	T				
Booths and Canopies	T	T	T	T	T	T	T	
Farmer's, Artisan, Craftsman Markets/Displays		T	T	T	T		T	
Construction staging and laydown with trailer – On or Off-site	T	T	T	T	T	T	T	Section 17.24.060
Loading and Unloading in Public Alley	T	T	T	T	T			

TABLE 4-1
ALLOWABLE LAND USE MATRIX[1]

P = Permitted Use
Z = Zoning Clearance Required
C = Conditional Use Permit Required
M = Minor Use Permit Required
T = Temporary Use Permit Required
Blank Space = Use or Use Category Is Not Permitted
*** See Footnote**

LAND USE ACTIVITY	BROADWAY MIXED-USE	TRANSIT MIXED-USE	VILLAGE COMMERCIAL	NEIGHBORHOOD COMMERCIAL	INNOVATION	MEDIUM/HIGH DENSITY RESIDENTIAL	CIVIC	Reference:
Christmas Tree/Pumpkin Patch Sales	T	T	T	T	T		T	
Outdoor Entertainment	T	T	T	T	T		T	
Outdoor Alcohol Sales & Consumption	T	T	T	T	T		T	Chapter 18.27

1 Land uses are required to be indoors unless allowed as an outdoor accessory use or otherwise noted in this table. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District.
2 Permitted in Art and Entertainment Overlay District Only.
3 Permitted in Historic Overlay District Only.
4 Use may include a retail element on the ground floor. See the development standards for further details.
5 Above ground floor only.
6 As prescribed in the referenced Municipal Code Section.
7 Multi-family subdivision projects greater than five units require a Tentative Map and Planning Commission City Council approval.
8 Nonconforming single-family residences are exempt from Section 18.20.030 (I,J,Q,R,S,T, and U).

4.10 ZONING DISTRICT STANDARDS

4.10.1 DEVELOPMENT AND DESIGN STANDARDS

This section establishes the development and design standards for projects within the Specific Plan area.

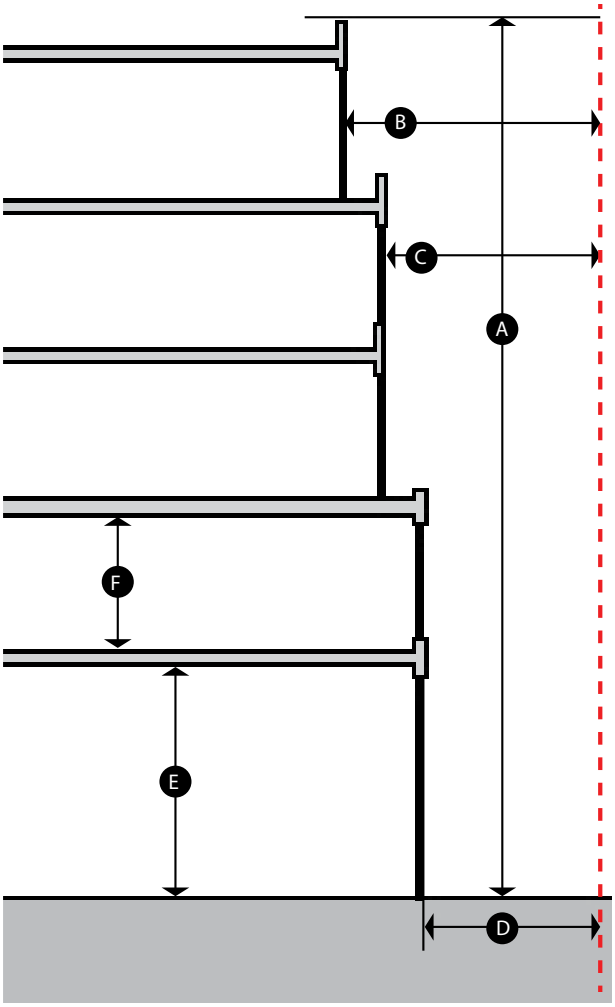
A series of tables with standards follows further below that will guide future projects within the Specific Plan. Three of the Zoning Districts (Village Commercial, Transit Mixed-Use, and portions of Innovation) allow for the greatest density/intensity and encompass the majority of the Specific Plan area. As such for these Zoning Districts, the Specific Plan includes illustrations that represent a possible representation of the site development standards in those areas. Any standards not specifically covered by this Specific Plan are subject to the regulations of the City's Municipal Code.

Development and Design standards shall apply to new developments and major additions (greater than 0.4 floor area ratio) only. Major remodels and minor additions are only required to comply with parking and landscape standards in the Municipal Code if feasible. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District. New development shall adhere to the mitigation requirements of the Mitigated Negative Declaration (MND) certified by the City Council for the adopted Downtown Specific Plan or subsequent certified CEQA document.

Density bonuses for the provision of affordable housing shall be permissible in accordance with Section 17.24.100 of the Municipal Code. The City Council finds that additional dwelling units increase costs for services. To offset this cost, Community Benefits may be incorporated into projects in order to achieve densities greater than the maximum number of allowable dwelling units per acre or as permissible under State Density Bonus Law. Fair share costs for downtown street improvements, parks, wayfinding and gateway signage and safety and maintenance are also expected to be paid for by developers for new developments and major additions.

VILLAGE COMMERCIAL ZONING DISTRICT

FIGURE 4.3



A	Number of Stories See Figure 4.2; varies up to **75'/5 Maximum**
B	Massing Setback (Floor 5)* **8' from BTL (min.)**
C	Massing Setback (Floor 3 & 4)* **0' from BTL (min.)**
D	Massing Setback (Floors 1 & 2) **BTL (min.) to 18' (max.)**
E	Ground Floor Minimum Ceiling Heights **14'**
F	Above Ground Floor Minimum Ceiling Heights **10'**

*Building massing requires Fire Department approval

VILLAGE COMMERCIAL ZONING DISTRICT:

Allows for a mixture of commercial and residential development that serves the community with the intent of creating a lively pedestrian-oriented shopping and restaurant area. Retail sales and services and/or restaurants are to be located on the ground floor. Hotel, office, and/or residential uses are to be located above or behind retail. Exterior building improvements and architecture will promote the City's history and small town feel. Connections to parking and civic and transit land uses will be required. Outdoor amenities and activities including live music and performances will be permitted. **Figure 4.3**, **Village Commercial Zoning District**, provides an illustration of this District. Additional density may be allowed for the provision of Affordable Housing and/or Community benefits as detailed in **Appendix A**.

TABLE 4.2-1
VILLAGE COMMERCIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units	BTL = Build to Line	PL = Property Line	Min. = minimum
#' = Number of Feet	Bldg. = Building	SF = Square Feet	Max. = maximum

Min. Density - Max. Density[2]		30 DUs/Acre minimum and 60 DUs/Acre maximum. (Min. and Max. reduced by 10 DUs/Acre for each story under 5 stories.)
Max. Floor Area Ratio (FAR)[3]		0.8 per Building Story.
Min. Lot Size		6,000 SF if 3 stories or less, 9,000 SF if 4 stories, and 12,000 SF if 5 stories
Min. Commercial Ground Floor		Front property line length with minimum depth of 60'; except where vehicular access ways are required
Build To Line		8' from property lines fronting streets
Front Yard Setback		18' max. from BTL excepting courtyards
Interior Side Yard Setback		0' (min.)
Rear Yard Setback		0'
Side Yard on Street Side of Corner Lot Setback		5' max. from BTL
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided		75' for 5 Stories; 65' for 4 stories; 55' for 3 stories; 45' for 2 stories or less
Required Parking		See Parking Standards **Appendix B** - Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	150 SF/DU with a 40% reduction for portions publicly available. For non-residential uses, 5% of the project's floor area shall be devoted to common open space with a 40% reduction for portions publicly available. Outdoor dining and patios count towards open space requirements.
	Private	50 SF/DU minimum on average; minimum 5' wide in any direction required
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40' of lineal street frontage (minimum 2" caliper, 10' height, at 8' vertical clearance at installation and minimum 25' canopy width after 10 years of growth).
		Min. 5% of lot area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between emergency

TABLE 4.2-1
VILLAGE COMMERCIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | BTL = Build to Line | PL = Property Line | Min. = minimum
#' = Number of Feet | Bldg. = Building | SF = Square Feet | Max. = maximum

	access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability	10 points required (See **Appendix C**)
Required Minimum Street Improvements	New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities for the project street frontage(s) as specified in the Downtown Specific Plan Chapter 6 -Mobility. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal Code Chapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project.
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.
Community Facilities District	New development and additions greater than 0.4 floor area ratio shall fund their fair share of maintenance and safety personnel, facility and operating costs through the formation of a community facilities district (CFD) or similar entity. An agreement not to oppose the formation of community facilities district shall be required for all developments with a building permit valuations greater than $25,000. The community facilities district shall include operating costs for events and programming.
Permissible Community Benefits	See **Appendix A.**

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

[2] A density bonus of up to 40% is available to applicants for the provision of Community Benefits (See **Appendix A**), affordable housing (See Section 17.24.100 of the Municipal Code) or a combination thereof. This density bonus percentage (40%) shall not be exceeded and can be applied to the maximum density stated in the Development Standards table; however, the density bonus must also not exceed the forecasted density established by land use area in **Appendix E**. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**). Minimum densities are required only when housing is proposed.

[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E)**.

TABLE 4.2-2
VILLAGE COMMERCIAL ZONING DISTRICT – DESIGN STANDARDS[1]

Architectural Standards	Massing Setback (Floors 1 & 2)[2]	BTL (min.) to 18' (max.)
	Massing Setback (Floor 3 & 4)	0' from BTL (min.); building massing requires Fire Department approval
	Massing Setback (Floor 5)	8' from BTL (min.); building massing requires Fire Department approval
	Articulation[3]	40% of building façade
	Allowable Styles	American Mercantile, Craftsman. See **Appendix D**
Minimum Ceiling Heights	Ground Floor	14'
	Above Ground Floor	10'
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3' and 8' on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building

TABLE 4.2-2
VILLAGE COMMERCIAL ZONING DISTRICT – DESIGN STANDARDS[1]

Allowable Max. Projections from BTL towards PL	Cornices, Eaves etc.	4’
	Arcade, Columns, Balconies	4’ (10’ min. height clearance)
	Awning, Canopy etc.	6’ (8’ min. height clearance)
	Bay or Feature Window; Attached Architectural Features and Art	4’
	Freestanding Art	8’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscape	8’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public. Property managers of apartments and homeowner associations are required to register in a Crime Free Multi-Housing Program.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in **Table 4.1** shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8’ height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding storefronts and shall include a minimum 8’ height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards.
Preservation of Historic Properties[4]	Minor Alteration[5]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[6]	Planned Development Permit required and Planning Commission approval required with recommendations from the Lemon Grove Historical Society.

1 Development and Design Standards within this Specific Plan may be waived or modified through Planning Commission approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

2 The massing setback is measured from all street frontage property lines.

3 Structural variation of wall planes.

4 Reference list of historic properties in the General Plan.

5 Includes interior alterations and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.

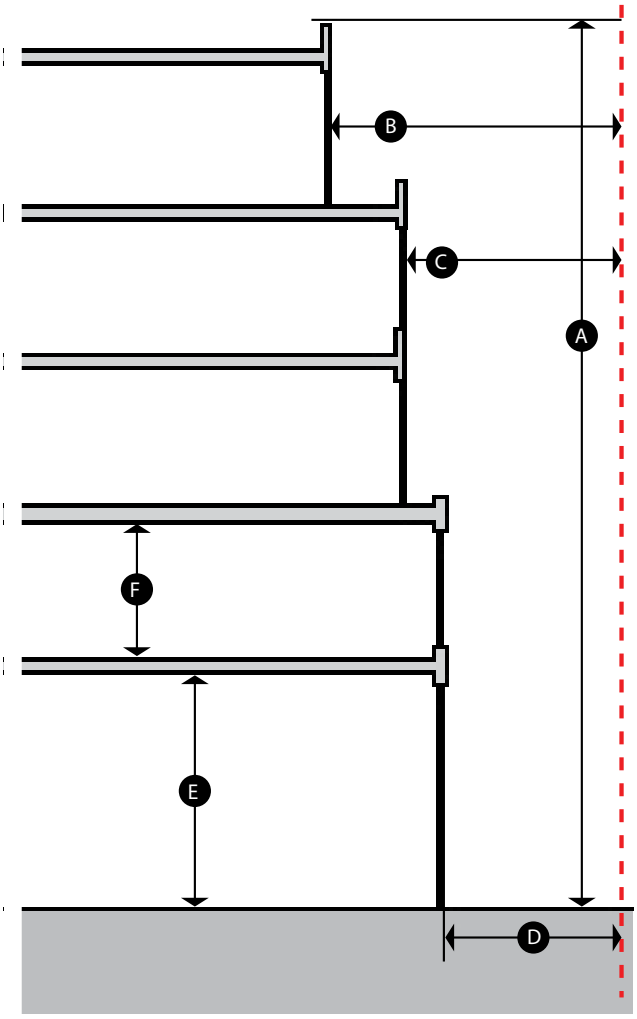
6 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

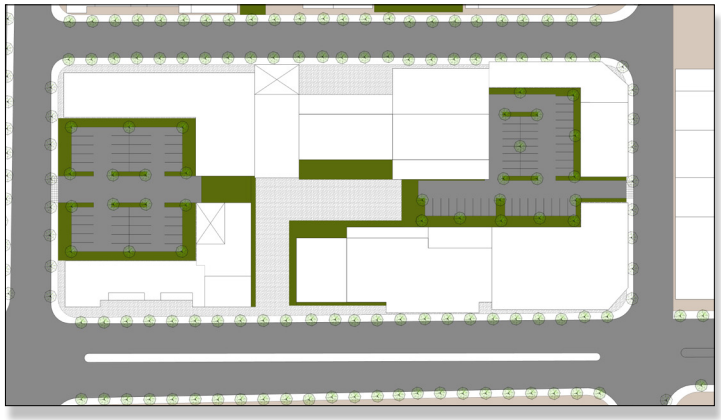
TABLE 4.2-3
VILLAGE COMMERCIAL ZONING DISTRICT – ART STANDARDS

Art Standards	Minimum Public Art	Fair share art public street and/or park improvements equal to greater than $1 per square feet of new floor area of private development for new commercial and residential developments shall be provided to increase public art resources within the district.
	Eligible Artworks	Public and private art complimenting the allowable architectural styles and including no commercial messages, including designs and logos, is permitted and encouraged.
	Elements of Design and Placement	Art should be incorporated into public and private surface improvements (e.g., crosswalks, parking stalls, pavement sections), open spaces and building facades and may include functional art, freestanding, wall and surface art and art incorporated into gateways signs, wayfinding signs, benches, street amenities and displays, utility boxes, etc.

TRANSIT MIXED-USE ZONING DISTRICT

FIGURE 4.4





A	Number of Stories[1] See Figure 4.2; varies up to **75'/5 Maximum**
B	Massing Setback (Floor 5)* **16' from BTL (min.)**
C	Massing Setback (Floor 3 & 4)* **8' from BTL (min.)**
D	Massing Setback (Floors 1 & 2) **BTL (min.) to 18' (max.)**
E	Ground Floor Minimum Ceiling Heights **14'**
F	Above Ground Floor Minimum Ceiling Heights **10'**

[1] Up to seven stories are allowed in Land Use Area A-37, as shown on Appendix E.

* Building massing requires Fire Department approval

TRANSIT MIXED USE ZONING DISTRICT:

Allows for a mix of pedestrian oriented retail commercial, civic, entertainment, office and residential development that take advantage of the convenient access to the nearby bus and trolley transit services with the intent of creating a modern lively entertaining and cultural experience for visitors and the community. Retail commercial uses such as restaurants, brewpubs, breweries, theatres and retailers located at ground level will provide goods and services for both residents and commuters. Ground floor uses along front property line shall be devoted to retail sales and services along collector streets and major roads. Outdoor pedestrian amenities and activities including live music and performances will be permitted. **Figure 4.4**, **Transit Mixed-Use Zoning District**, provides an illustration of this District. Additional density may be allowed for the provision of Affordable Housing and/or Community benefits as detailed in **Appendix A.**

TABLE 4.3-1
TRANSIT MIXED USE ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units	BTL = Build to Line	PL = Property Line	Min. = minimum
#' = Number of Feet	Bldg. = Building	SF = Square Feet	Max. = maximum

Min. Density - Max. Density[2]		30 DUs/Acre minimum and 60 DUs/Acre maximum (Min. and Max. reduced by 10 DUs/Acre for each story under 5 stories)
Max. Floor Area Ratio (FAR)[3]		0.8 per Building Story
Min. Lot Size		6,000 SF if 3 stories or less, 9,000 SF if 4 stories, and 12,000 SF if 5 stories
Min. Commercial Ground Floor		Front property line length with minimum depth of 60'; except where vehicular access ways are required
Build To Line		8' from property lines fronting streets
Front Yard Setback		18' max. from BTL excepting courtyards
Interior Side Yard Setback		0' (min)
Rear Yard Setback		0'
Side Yard on Street Side of Corner Lot Setback		5' max from BTL
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided[4]		75' for 5 Stories; 65' for 4 stories; 55' for 3 stories; 45' for 2 stories or less
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	150 SF/DU with a 40% reduction for portions publicly available. For non-residential uses, 5% of the project's floor area shall be devoted to common open space with a 40% reduction for portions publicly available. Outdoor dining and patios count towards open space requirements.
	Private	50 SF/DU minimum on average; minimum 5' wide in any direction required
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40' of lineal street frontage (minimum 2" caliper, 10' height, at 8' vertical clearance at installation and minimum 25' canopy width after 10 years of growth).
		Min. 5% of lot area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.

TABLE 4.3-1
TRANSIT MIXED USE ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | BTL = Build to Line | PL = Property Line | Min. = minimum
#' = Number of Feet | Bldg. = Building | SF = Square Feet | Max. = maximum

	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability	10 points required (See **Appendix C**)
Required Minimum Street Improvements	New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole street improvements and amenities for the project street frontage(s) as specified in the Downtown Specific Plan; Chapter 6 –Mobility. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal CodeChapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.
Community Facilities District	New development and additions greater than 0.4 floor area ratio shall fund their fair share of maintenance and safety personnel, facility and operating costs through the formation of a community facilities district (CFD) or similar entity. An agreement not to oppose the formation of community facilities district shall be required for all developments with a building permit valuations greater than $25,000. The community facilities district shall include operating costs for events and programming.
Permissible Community Benefits	See **Appendix A**

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

2 A density bonus of up to 40% is available to applicants for the provision of Community Benefits (See **Appendix A**), affordable housing (See Section 17.24.100 of the Municipal Code) or a combination thereof. This density bonus percentage (40%) shall not be exceeded and can be applied to the maximum density stated in the Development Standards table; however, the density bonus must also not exceed the forecasted density established by land use area in **Appendix E**. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**). Minimum densities are required only when housing is proposed.

3 Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

4 Up to seven stories are allowed in Land Use Area A-37, as shown on **Appendix E**.

TABLE 4.3-2
TRANSIT MIXED USE ZONING DISTRICT – DESIGN STANDARDS[1]

Architectural Standards	Massing Setback (Floors 1 and 2) [2]	BTL (min.) to 18' (max.)
	Massing Setback (Floors 3 and 4)	8' from BTL (min.); building massing requires Fire Department approval
	Massing Setback (Floors 5-7)	16' from BTL (min.); building massing requires Fire Department approval
	Articulation[3]	40 % of building façade
	Allowable Styles – Historic Overlay	American Mercantile, Mission Revival, Craftsman, Queen Anne, Tudor. See **Appendix D**. Refer to the Overlay Description for additional standards.
	Allowable Styles – Art	Art Deco, Contemporary, Historic Modern. See **Appendix D**. Refer to the

TABLE 4.3-2
TRANSIT MIXED USE ZONING DISTRICT – DESIGN STANDARDS[1]

	and Entertainment Overlay	Overlay Description for additional standards.
Minimum Ceiling Heights	Ground Floor	14’
	Above Ground Floor	10’
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3’ and 8’ on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building.
Allowable Max. Projections From BTL towards PL	Cornices, Eaves etc.	4’
	Arcade, Columns, Balconies	4’ (10’ min. height clearance)
	Awning, Canopy etc.	6’ (8’ min. height clearance)
	Bay or Feature Window; Attached Architectural Features and Art	4’
	Freestanding Art	8’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscape	8’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public. Property managers of apartments and homeowner associations are required to register in a Crime Free Multi-Housing Program.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8’ height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding store fronts and shall include a minimum 8’ height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards; 6) Within the Arts and Entertainment Overlay, theatrical and artistic wall and projecting signage is exempt from the sign design standards provided it has: 1) a minimum of eight feet vertical clearance; and 2) wall signage is no more than 20 percent of the area of the building face. Statues less than twenty feet in height are exempt from sign regulations. Within the Arts and Entertainment Overlay area, theatrical and artistic wall and projecting signage is exempt from the sign design standards provided it has: 1) a minimum of eight feet vertical clearance; 2) wall signage is no more than 20 percent of the area of the building face. Art shall be incorporated into the

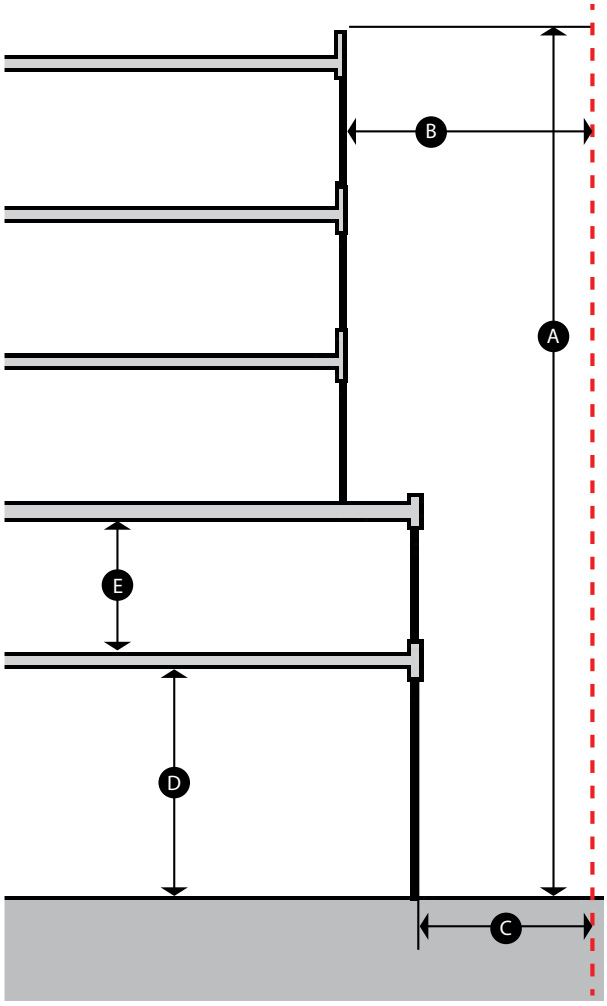
TABLE 4.3-2
TRANSIT MIXED USE ZONING DISTRICT – DESIGN STANDARDS[1]

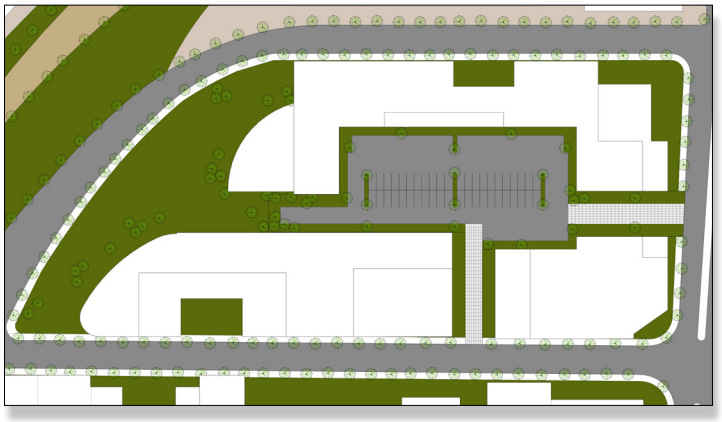
		public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.). Statues less than twenty feet in height are exempt from sign regulations. Within the Historic Overlay area, new development, renovations and demolitions to historic buildings and landmarks listed in the General Plan shall require recommendations for approval from the Lemon Grove Historical Society with appeal rights to the Lemon Grove Planning Commission.
Preservation of Historic Properties[4]	Minor Alteration[5]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[6]	Planned Development Permit required and Planning Commission approval required with recommendations from the Lemon Grove Historical Society.

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
2 The massing setback is measured from all street frontage property lines.
3 Structural variation of wall planes.
4 Reference list of historic properties in the General Plan.
5 Includes interior alterations with no framing demolition and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.
6 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

TABLE 4.3-3
TRANSIT MIXED USE ZONING DISTRICT – ART STANDARDS

Art Standards	Minimum Private or Public Art	Within the Arts and Entertainment Overlay District, art visible to the public shall be provided at a rate of: 1) 10 percent of the largest building face for wall art; 2) 1 percent of the of the largest building face for sculptural art (calculated based on the largest side of the sculpture inscribed into a rectangle; the area of the rectangle(s) must be equal to greater than 1 percent of the building face). For the entire Transit Mixed Use Zoning District, fair share art public street and/or park improvements equal to greater than $2 per square feet of new floor area of private development for new commercial and residential developments shall be provided to increase public art resources within the district.
	Eligible Artworks	Public and private art complimenting the allowable architectural styles and including no commercial messages, including designs and logos, is permitted and encouraged
	Elements of Design and Placement	Art should be incorporated into public and private surface improvements (e.g., crosswalks, parking stalls, pavement sections), open spaces and building facades and may include functional art, freestanding, wall and surface art and art incorporated into gateways signs, wayfinding signs, benches, street amenities and displays, utility boxes, etc.
	Arts and Entertainment Overlay	See additional guidelines in the description for the Arts and Entertainment Overlay





A	Number of Stories See Figure 4.2; varies up to **75'/5 Maximum**
B	Massing Setback (greater than two floors) **Up to 20' from BTL**
C	Massing Setback (Floors 1 & 2) **0' (min.) to 18' (max.) from BTL**
D	Ground Floor Minimum Ceiling Heights **14'**
E	Above Ground Floor Minimum Ceiling Heights **10'**

INNOVATION ZONING DISTRICT:

Allows a wide range of employment uses, hotels and conference centers, professional and corporate offices, contractor's offices, medical and higher education facilities, automobile sales and service, wholesale and manufacturing businesses, research and development, and high technology production are permitted with the intent of creating a lively pedestrian-oriented employment district with individual campuses including open space. Retail uses including retail sales and service uses, galleries, restaurants, brewpubs, and breweries are also permitted and encouraged on the ground floor of collector streets. Outdoor pedestrian amenities and activities including live music and performances will be permitted. **Figure 4.5**, **Innovation Zoning District**, provides an illustration of this District.

TABLE 4.4-1
INNOVATION ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | **BTL = Build to Line** | **PL = Property Line** | **Min. = minimum**
#' = Number of Feet | **Bldg. = Building** | **SF = Square Feet** | **Max. = maximum**

Max. Floor Area Ratio (FAR)[2,3]		0.8 per Building Story
Min. Lot Size		6,000 SF if 3 stories or less, 9,000 SF if 4 stories, and 12,000 SF if 5 stories
Min. Commercial Ground Floor		Front property line length with minimum depth of 60'; except where vehicular access ways are required
Build to Line		8' from property lines fronting streets
Front Yard Setback		18' max. from BTL excepting courtyards
Interior Side Yard Setback		0' (min.)
Rear Yard Setback		0'
Side Yard on Street Side of Corner Lot Setback		5 max' from BTL
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided		75' for 5 Stories; 65' for 4 stories; 55' for 3 stories; 45' for 2 stories or less
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	For non-residential uses, 5% of the project's floor area shall be devoted to common open space with a 40% reduction for portions publicly available. Outdoor dining and patios count towards open space requirements.
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40' of lineal street frontage (minimum 2" caliper, 10' height, at 8' vertical clearance at installation and minimum 25' canopy width after 10 years of growth).
		Min. 5% of lot area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability		10 points required (See **Appendix C**)
Required Minimum Street Improvements		New development and additions greater than 0.4 floor area ratio shall fund

TABLE 4.4-1
INNOVATION ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | **BTL = Build to Line** | **PL = Property Line** | **Min. = minimum**
#' = Number of Feet | **Bldg. = Building** | **SF = Square Feet** | **Max. = maximum**

	their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities for the project street frontage(s) as specified in the Downtown Specific Plan Chapter 6 -Mobility. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal Code Chapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project.
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.
Community Facilities District	New development and additions greater than 0.4 floor area ratio shall fund their fair share of maintenance and safety personnel, facility and operating costs through the formation of a community facilities district (CFD) or similar entity. An agreement not to oppose the formation of community facilities district shall be required for all developments with a building permit valuations greater than $25,000. The community facilities district shall include operating costs for events and programming. There is no minimum size for a CFD.

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
[2] The intensity by land use area in **Appendix E** shall not be exceeded. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).
[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

TABLE 4.4-2
INNOVATION ZONING DISTRICT – DESIGN STANDARDS[1]

Architectural Standards	Massing Setback (Floors 1 and 2)[2]	0' BTL (min.) to 18' (max.)
	Massing Setback (greater than two floors)	Up to 20' from BTL
	Articulation[3]	40 % of building façade
	Allowable Styles	Art Deco, Historic Modern, or Contemporary. See **Appendix D**
Minimum Ceiling Heights	Ground Floor	14'
	Above Ground Floor	10'
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3' and 8' on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building
Allowable Max. Projections from building towards, but not over, the PL	Cornices, Eaves etc.	4'
	Arcade, Columns, Balconies	4' (10' min. height clearance)
	Awning, Canopy etc.	6' (8' min. height clearance)
	Bay or Feature Window; Attached Architectural	4'

TABLE 4.4-2
INNOVATION ZONING DISTRICT – DESIGN STANDARDS[1]

	Features and Art	
	Freestanding Art	18’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscape	18’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8’ height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding storefronts and shall include a minimum 8’ height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards
Preservation of Historic Properties[4]	Minor Alteration[5]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[6]	Planned Development Permit required and Planning Commission approval required with recommendations from the Lemon Grove Historical Society.

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

2 The massing setback is measured from all street frontage property lines.

3 Structural variation of wall planes.

4 Reference list of historic properties in the General Plan.

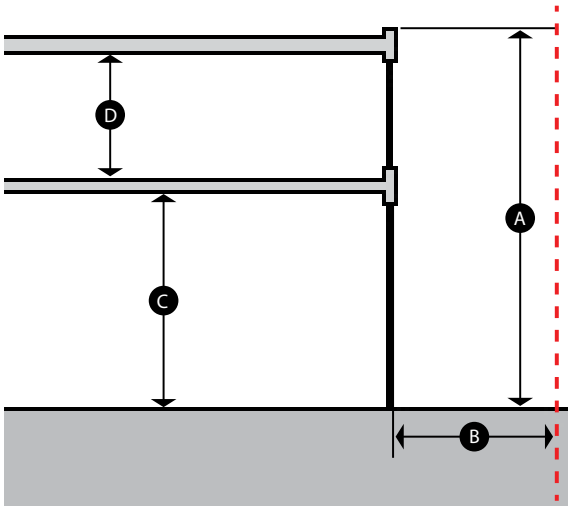
5 Includes interior alterations with no framing demolition and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.

6 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

TABLE 4.4-3
INNOVATION ZONING DISTRICT – ART STANDARDS

Art Standards	Minimum Public Art	Fair share art public street and/or park improvements equal to greater than $1 per square feet of new floor area of private development for new commercial and residential developments shall be provided to increase public art resources within the district.
	Eligible Artworks	Public and private art complimenting the allowable architectural styles and including no commercial messages, including designs and logos, is permitted and encouraged
	Elements of Design and Placement	Art should be incorporated into public and private surface improvements (e.g., crosswalks, parking stalls, pavement sections), open spaces and building facades and may include functional art, freestanding, wall and surface art and art incorporated into gateways signs, wayfinding signs, benches, street amenities and displays, utility boxes, etc.

FIGURE 4.6



A	Number of Stories See Figure 4.2; varies up to **45'/2 Stories Maximum**
B	Massing Setback (Floors 1 & 2) **0' (min.) to 10' (max.) from BTL**
C	Ground Floor Minimum Ceiling Heights **14'**
D	Above Ground Floor Minimum Ceiling Heights **10'**

BROADWAY MIXED-USE ZONING DISTRICT:

Allows for a variety of land uses including retail sales and services, professional and corporate offices, hotels, restaurants, and multi-family residences above retail uses in a pedestrian oriented corridor with the intent of creating a retail service area for the community. Vehicular centric and drive-through uses are permissible provided storefronts are along pedestrian pathways. Additional density may be allowed for the provision of Affordable Housing and/or Community benefits, such as areas for public parking, parks, plazas and art. Community benefits are listed in **Appendix A**. **Figure 4.6**, **Broadway Mixed-Use Zoning District**, provides an illustration of this District.

TABLE 4.5-1
BROADWAY MIXED-USE ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | **BTL = Build to Line** | **PL = Property Line** | **Min. = minimum**
#' = Number of Feet | **Bldg. = Building** | **SF = Square Feet** | **Max. = maximum**

Min. Density - Max. Density[2]		Up to 30 DUs/Acre maximum (No minimums)
Max. Floor Area Ratio (FAR)[3]		0.8 per Building Story
Min. Lot Size		6,000 SF
Min. Commercial Ground Floor		Front property line length with minimum depth of 60'; except where vehicular access ways are required
Build To Line		8' from property lines fronting streets
Front Yard Setback		18' max. from BTL excepting courtyards
Interior Side Yard Setback		0' (min.)
Rear Yard Setback		0'
Side Yard Setback on Street Side of Corner Lot Setback		5' max from BTL
Maximum Number of Stories		See **Figure 4.2**
Max. Bldg. Height by Number of Stories provided		45'/2 Stories
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	150 SF/DU with a 40% reduction of portions publicly available. For non-residential uses, 5% of the project's floor area shall be devoted to common open space with a 40% reduction of portions publicly available. Outdoor dining and patios count towards open space requirements.
	Private	50 SF/DU minimum on average; minimum 5' wide in any direction required
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40' of lineal street frontage (minimum 2" caliper, 10' height, at 8' vertical clearance at installation and minimum 25' canopy width after 10 years of growth).
		Min. 5% landscape area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between

TABLE 4.5-1
BROADWAY MIXED-USE ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | **BTL = Build to Line** | **PL = Property Line** | **Min. = minimum**
#' = Number of Feet | **Bldg. = Building** | **SF = Square Feet** | **Max. = maximum**

	emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability	10 points required (See **Appendix C**)
Required Minimum Street Improvements	New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities shall be required for the project street frontage(s) as designated specified in the Downtown Specific Plan; Chapter 6 -Mobility except that an in-lieu fee as specified in an engineering cost estimate or fraction thereof shall be provided when immediate improvements are not practical as determined by the City Engineer. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal CodeChapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project.
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.
Permissible Community Benefits	See **Appendix A**

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

[2] A density bonus of up to 40% is available to applicants for the provision of Community Benefits (See **Appendix A**), affordable housing (See Section 17.24.100 of the Municipal Code) or a combination thereof. This density bonus percentage (40%) shall not be exceeded and can be applied to the maximum density stated in the Development Standards table; however, the density bonus must also not exceed the forecasted density established by land use area in **Appendix E.** Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**). Minimum densities are required only when housing is proposed.

[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

TABLE 4.5-2
BROADWAY MIXED-USE ZONING DISTRICT – DESIGN STANDARDS[1]

DUs = Dwelling Units | BTL = Build to Line | PL = Property Line | Min. = minimum
#' = Number of Feet | Bldg. = Building | SF = Square Feet | Max. = maximum

Architectural Standards	Massing Setback	0' (min.) to 10' (max.) from BTL
	Articulation[2]	40 % of building façade
	Allowable Themes	Art Deco. See **Appendix XYZ**.
Minimum Ceiling Heights	Ground Floor	14'
	Above Ground Floor	10'
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3' and 8' on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building
Allowable Max. Projections from Building towards, but not	Cornices, Eaves etc.	4'
	Arcade, Columns, Balconies	4' (10' min. height clearance)
	Awning, Canopy etc.	6' (8' min. height clearance)
	Bay or Feature Window;	4'

TABLE 4.5-2
BROADWAY MIXED-USE ZONING DISTRICT – DESIGN STANDARDS[1]

over, PL	Attached Architectural Features and Art	
	Freestanding Art	10’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscaping	10’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public. Property managers of apartments and homeowner associations are required to register in a Crime Free Multi-Housing Program.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8’ height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding storefronts and shall include a minimum 8’ height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards
Preservation of Historic Properties[3]	Minor Alteration[4]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[5]	Planned Development Permit required and City Council approval required

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
2 Structural variation of wall planes.
3 Reference list of historic properties in the General Plan.
4 Includes interior alterations and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.
5 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

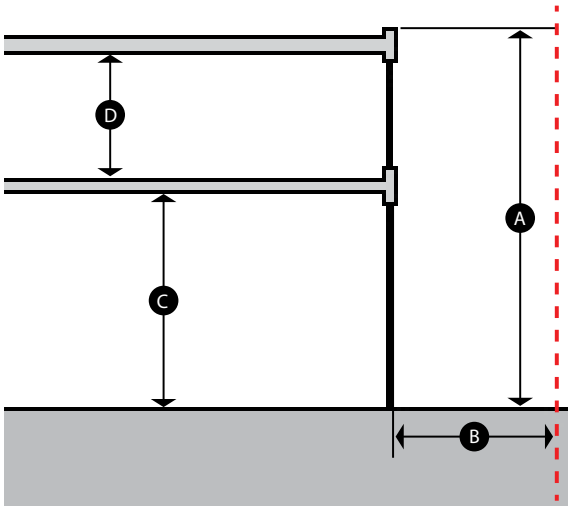
TABLE 4.5-3
BROADWAY MIXED-USE ZONING DISTRICT – ART STANDARDS

Art Standards	Minimum Public Art	Fair share art public street and/or park improvements equal to greater than $1 per square feet of new floor area of private development for new commercial and residential developments shall be provided to increase public art resources within the district.

TABLE 4.5-3
BROADWAY MIXED-USE ZONING DISTRICT – ART STANDARDS

	Eligible Artworks	Public and private art complimenting the allowable architectural styles and including no commercial messages, including designs and logos, is permitted and encouraged
	Elements of Design and Placement	Art should be incorporated into public and private surface improvements (e.g., crosswalks, parking stalls, pavement sections), open spaces and building facades and may include functional art, freestanding, wall and surface art and art incorporated into gateways signs, wayfinding signs, benches, street amenities and displays, utility boxes, etc.

FIGURE 4.7



A	Number of Stories See Figure 4.2; varies up to **45'/2 Stories Maximum**
B	Massing Setback (Floors 1 & 2) **0' (min.) to 10' (max.) from BTL**
C	Ground Floor Minimum Ceiling Heights **14'**
D	Above Ground Floor Minimum Ceiling Heights **10'**

NEIGHBORHOOD COMMERCIAL ZONING DISTRICT

Allows for retail operations that are oriented toward families and business professionals providing a broad range of goods and services, catering to surrounding single-family residents and local customers, such as restaurants, banks and accounting offices. **Figure 4.7**, **Neighborhood Commercial Zoning District**, provides an illustration of this District.

TABLE 4.6-1
NEIGHBORHOOD COMMERCIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units	**BTL = Build to Line**	**PL = Property Line**	**Min. = minimum**
#' = Number of Feet	**Bldg. = Building**	**SF = Square Feet**	**Max. = maximum**

Minimum Lot Size		6,000 SF
Max. Floor Area Ratio (FAR)[2,3]		0.8 per Building Story
Build to Line		8' from property lines fronting streets
Front Yard Setback		18' max from BTL excepting courtyards
Interior Side Yard Setback		0' (min.)
Rear Yard Setback		0'
Side Yard on Street Side of Corner Lot Setback		5' max from BTL
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided		45'/2 Stories
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	For non-residential uses, 5% of the project's floor area shall be devoted to common open space with a 40% reduction for portions publicly available. Outdoor dining and patios count towards open space requirements.
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40' of lineal street frontage (minimum 2" caliper, 10' height, at 8' vertical clearance at installation and minimum 25' canopy width after 10 years of growth).
		Min. 5% landscape area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability		10 points required (See **Appendix C**)
Required Minimum Street Improvements		New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities shall be required for the project street frontage(s) as designated specified in the Downtown Specific Plan; Chapter 6 - Mobility except that an in-lieu fee as specified in an engineering cost estimate or fraction thereof shall be provided when immediate improvements are not practical as determined by the City Engineer. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal

TABLE 4.6-1
NEIGHBORHOOD COMMERCIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

DUs = Dwelling Units | **BTL = Build to Line** | **PL = Property Line** | **Min. = minimum**
#' = Number of Feet | **Bldg. = Building** | **SF = Square Feet** | **Max. = maximum**

	CodeChapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project.
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
[2] The intensity by land use area in **Appendix E** shall not be exceeded. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).
[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

TABLE 4.6-2
NEIGHBORHOOD COMMERCIAL ZONING DISTRICT – DESIGN STANDARDS[1]

DUs = Dwelling Units | BTL = Build to Line | PL = Property Line | Min. = minimum
#' = Number of Feet | Bldg. = Building | SF = Square Feet | Max. = maximum

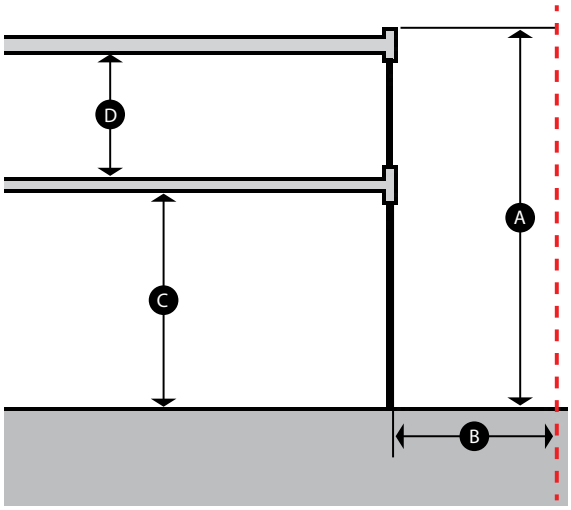
Architectural Standards	Massing Setback	0' (min.) to 10' (max.) from BTL
	Articulation[2]	40 % of building façade
	Allowable Styles	Contemporary. See **Appendix D**.
Minimum Ceiling Heights	Ground Floor	14'
	Above Ground Floor	10'
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3' and 8' on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building
Allowable Max. Projections from Building towards, but not over, PL	Cornices, Eaves etc.	4'
	Arcade, Columns, Balconies	4' (10' min. height clearance)
	Awning, Canopy etc.	6' (8' min. height clearance)
	Bay or Feature Window; Attached Architectural Features and Art	4'
	Freestanding Art	10'
	Ticket booth or Service Window	4'
	Projecting Signs	3' (8' min. vertical clearance)
	Trees and Landscape	10'
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.

TABLE 4.6-2
NEIGHBORHOOD COMMERCIAL ZONING DISTRICT – DESIGN STANDARDS[1]

DUs = Dwelling Units | BTL = Build to Line | PL = Property Line | Min. = minimum
#' = Number of Feet | Bldg. = Building | SF = Square Feet | Max. = maximum

	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8' height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding storefronts and shall include a minimum 8' height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards
Preservation of Historic Properties[3]	Minor Alteration[4]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[5]	Planned Development Permit required and City Council approval required

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
2 Structural variation of wall planes.
3 Reference list of historic properties in the General Plan.
4 Includes interior alterations and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.
5 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.



A	Number of Stories See Figure 4.2; varies up to **45'/2 Stories Maximum**
B	Massing Setback (Floors 1 & 2) **8' from Property Line Fronting Streets**
C	Ground Floor Minimum Ceiling Heights **14'**
D	Above Ground Floor Minimum Ceiling Heights **10'**

CIVIC ZONING DISTRICT:

Allows for public uses and service facilities, such as government offices and facilities, parks/recreational facilities, post office, libraries, schools and fire and law enforcement stations. Uses compatible with a civic nature, such as a community/conference center, may also be allowed. Outdoor pedestrian amenities and activities including live music and performances will be permitted. **Figure 4.8**, **Civic Zoning District**, provides an illustration of this District.

TABLE 4.7-1
CIVIC ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

Max. Floor Area Ratio (FAR) [2,3]		.8 per building story
Min. Commercial Ground Floor		Front property line length with minimum depth of 60’; except where vehicular access ways are required
Min. Lot Size		6,000 SF if 3 stories or less
Min. Commercial Ground Floor		Front property line length with minimum depth of 60’; except where vehicular access ways are required
Build to Line		8’ from property lines fronting streets
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided		45’/2 stories
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	For non-residential uses, 5% of the project’s floor area shall be devoted to common open space with a 40% reduction for portions publicly available. Outdoor dining and patios count towards open space requirements.
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40’ of lineal street frontage (minimum 2” caliper, 10’ height, at 8’ vertical clearance at installation and minimum 25’ canopy width after 10 years of growth).
		Min. 5% of lot area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability		10 points required (See **Appendix C**)
Required Minimum Street Improvements		New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities for the project street frontage(s) as specified in the Downtown Specific Plan Chapter 6 -Mobility. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal CodeChapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the

TABLE 4.7-1
CIVIC ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

	proposed development project.
Required Gateway and Wayfinding Signs	New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
[2] The intensity by land use area in **Appendix E** shall not be exceeded. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).
[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

TABLE 4.7-2
CIVIC ZONING DISTRICT – DESIGN STANDARDS[1]

Architectural Standards	Articulation[2]	40 % of building façade
	Allowable Styles	Contemporary, Historic Modern, or Mission Revival. See **Appendix D**.
Minimum Ceiling Heights	Ground Floor	14’
	Above Ground Floor	10’
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3’ and 8’ on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building
Allowable Max. Projections from BTL towards PL	Cornices, Eaves etc.	4’
	Arcade, Columns, Balconies	4’ (10’ min. height clearance)
	Awning, Canopy etc.	6’ (8’ min. height clearance)
	Bay or Feature Window; Attached Architectural Features and Art	4’
	Freestanding Art	8’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscaping	8’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public.
	Allowable Paving Materials	On-site paving visible from the public right-of-way shall be compatible with adjacent surface improvements and/or the architectural style provided for the building.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12, except as follows: 1) hanging signs are permissible and shall include a minimum 8’ height clearance; 2) Awnings or canopies are permissible and shall compliment the door and window openings or structural bays of the building façade or the surrounding storefronts and shall include a minimum 8’ height clearance and the underside shall be open; 3) signage shall compliment the architectural style of the building to the extent feasible; 4) Sidewalk mosaic signs are permissible

TABLE 4.7-2
CIVIC ZONING DISTRICT – DESIGN STANDARDS[1]

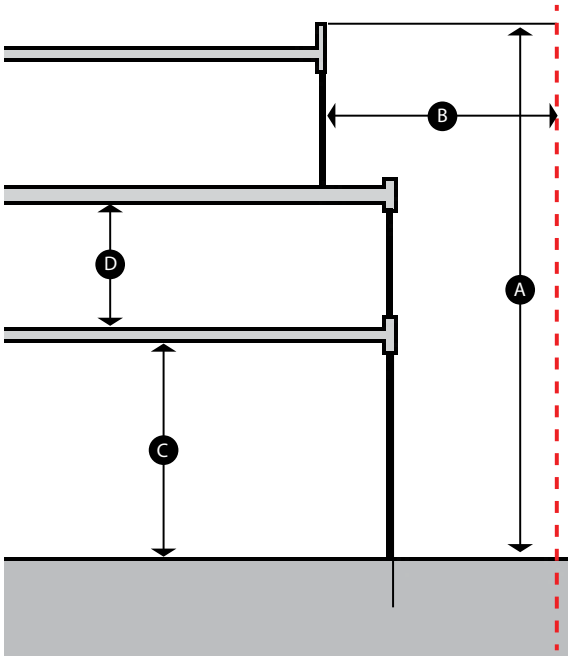
		and shall compliment the architectural style of the building and the adjacent surface improvements; 5) Freestanding wayfinding signs are permissible in accordance with wayfinding signage standards
Preservation of Historic Properties[3]	Minor Alteration[4]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[5]	Planned Development Permit required and City Council approval required

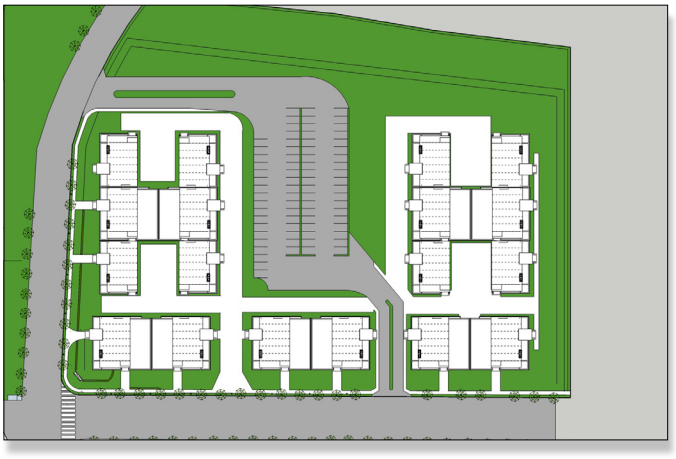
1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.
2 Structural variation of wall planes.
3 Reference list of historic properties in the General Plan.
4 Includes interior alterations and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.
5 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

TABLE 4.7-3
CIVIC ZONING DISTRICT – ART STANDARDS

Art Standards	Minimum Public Art	Fair share art public street and/or park improvements equal to greater than $1 per square feet of new floor area of private development for new commercial and residential developments shall be provided to increase public art resources within the district.
	Eligible Artworks	Public and private art complimenting the allowable architectural styles and including no commercial messages, including designs and logos, is permitted and encouraged
	Elements of Design and Placement	Art should be incorporated into public and private surface improvements (e.g., crosswalks, parking stalls, pavement sections), open spaces and building facades and may include functional art, freestanding, wall and surface art and art incorporated into gateways signs, wayfinding signs, benches, street amenities and displays, utility boxes, etc.

FIGURE 4.9





A	Number of Stories See Figure 4.2; varies up to **55'/3 Maximum**
B	Front Yard Setback **10' Minimum**
C	Ground Floor Minimum Ceiling Heights **14'**
D	Above Ground Floor Minimum Ceiling Heights **10'**

MEDIUM/HIGH DENSITY RESIDENTIAL ZONING DISTRICT:

Allows for duplexes, town-houses, condominiums and apartments. Typical uses include accessory dwelling units, churches, day care centers, open space, public facilities, home businesses and others which are compatible with the surrounding neighborhood. **Figure 4.9**, **Medium/High Density Residential Zoning District**, provides an illustration of this District.

TABLE 4.8-1
MEDIUM/HIGH RESIDENTIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

Min. Density - Max. Density[2,3]		30 DUs/Acre minimum and 40 DUs/Acre maximum.
Min. Lot Size		10,000 SF
Front Yard Setback		10’ minimum
Interior Side Yard Setback		5’ minimum
Rear Yard Setback		5’ minimum
Side Yard on Street Side of Corner Lot Setback		10’ minimum
Maximum Number of Stories		See **Figure 4.2**
Maximum Bldg. Height by Number of Stories provided		55’ maximum; 3 stories maximum
Required Parking		See Parking Standards **Appendix B** Off-Street Parking
Loading		Loading is prohibited in public streets and alleys at all times. Appropriate loading areas shall be provided for all land uses as applicable. Loading within parking areas drive aisles and driveways is prohibited between 10am and 7pm.
Required Open Space	Common	150 SF/DU with a 40% reduction for portions publicly available.
	Private	50 SF/DU minimum on average; minimum 5’ wide in any direction required
	Public Parkland	Public park space shall be provided for new development and additions greater than 0.4 floor area ratio including land and improvements at a rate of 1.5 acres per 1,000 residents and three percent of floor area for new development in accordance with comparable land valuations and engineering estimates for park improvements. Estimate one resident per studio dwelling unit plus one resident per bedroom. This replaces public parkland fees.
Required Minimum Landscape		Minimum 1 tree per 40’ of lineal street frontage (minimum 2” caliper, 10’ height, at 8’ vertical clearance at installation and minimum 25’ canopy width after 10 years of growth).
		Min. 5% of lot area in compliance with Chapter 18.44 of the Municipal Code. Rooftop landscape may be a part.
		Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Required Minimum Sustainability		10 points required (See **Appendix C**)
Required Minimum Street Improvements		New development and additions greater than 0.4 floor area ratio shall fund their fair share of full street improvements as defined by Municipal Code Section 12.10, including undergrounding overhead utilities from pole to pole, street improvements and amenities for the project street frontage(s) as specified in the Downtown Specific Plan Chapter 6 -Mobility. Fair share costs for intersection improvements for intersections on either side of the primary street frontage shall be a part. Development not referenced herein, but subject to Municipal CodeChapter 12.10 shall provide street improvements equal to 10 percent of the total building valuation of the proposed development project.
Required Gateway and Wayfinding Signs		New development and additions greater than 0.4 floor area ratio shall fund their fair share of gateway and wayfinding signage as specified in the Downtown Specific Plan Mobility Chapter, based on percentage of street frontage of the downtown area less public lands.

TABLE 4.8-1
MEDIUM/HIGH RESIDENTIAL ZONING DISTRICT – DEVELOPMENT STANDARDS[1]

Permissible Community Benefits	See **Appendix A**

[1] Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

[2] A density bonus of up to 40% is available to applicants for the provision of Community Benefits (See **Appendix A**), affordable housing (See Section 17.24.100 of the Municipal Code) or a combination thereof. This density bonus percentage (40%) shall not be exceeded and can be applied to the maximum density stated in the Development Standards table; however, the density bonus must also not exceed the forecasted density established by land use area in **Appendix E**. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**). Minimum densities are required only when housing is proposed.

[3] Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District (**Appendix E**).

TABLE 4.8-2
MEDIUM/HIGH RESIDENTIAL ZONING DISTRICT – DESIGN STANDARDS[1]

Architectural Standards	Articulation[2]	40% of building façade
	Allowable Styles	Contemporary and Art Deco. See **Appendix D**
Minimum Ceiling Heights	Ground Floor	14’
	Above Ground Floor	10’
Required Ground Floor Fenestration (Transparency)		50% of ground floor between 3’ and 8’ on the street wall. Any fenestration provided at pedestrian eye level must have visibility to the inside of the building
Allowable Max. Projections from BTL towards PL	Cornices, Eaves etc.	4’
	Arcade, Columns, Balconies	4’ (10’ min. height clearance)
	Awning, Canopy etc.	6’ (8’ min. height clearance)
	Bay or Feature Window; Attached Architectural Features and Art	4’
	Freestanding Art	8’
	Ticket booth or Service Window	4’
	Projecting Signs	3’ (8’ min. vertical clearance)
	Trees and Landscape	8’
Exterior Site Standards	Crime Prevention Through Environmental Design	Outdoor spaces shall be well lit and transparent from the public right-of-way if accessible to the public. Property managers of apartments and homeowner associations are required to register in a Crime Free Multi-Housing Program.
	Allowable On-Site Lighting	Adequate lighting for all parking, open space and outdoor areas complimenting the selected architectural style provided for the building shall be provided. Lighting shall be per an approved lighting plan. Glare to vehicles and pedestrians shall be reduced to below a level of significance.
	Accessory Uses	Accessory uses specified in Table 4.1 shall compliment the selected architectural style.
	Signage	Signs shall be consistent with the Chapter 18.12

TABLE 4.8-2
MEDIUM/HIGH RESIDENTIAL ZONING DISTRICT – DESIGN STANDARDS[1]

Preservation of Historic Properties[3]	Minor Alteration[4]	Zoning clearance and Lemon Grove Historical Society approval required. Decisions of the Historical Society may be appealed to the Planning Commission.
	Major Alteration or Demolition[5]	Planned Development Permit required and Planning Commission approval required with recommendations from the Lemon Grove Historical Society.

1 Development and Design Standards within this Specific Plan may be waived or modified through City Council approval of a planned development permit provided equivalent benefits are provided in accordance with Section 17.28.030(D) of the Municipal Code.

2 Structural variation of wall planes.

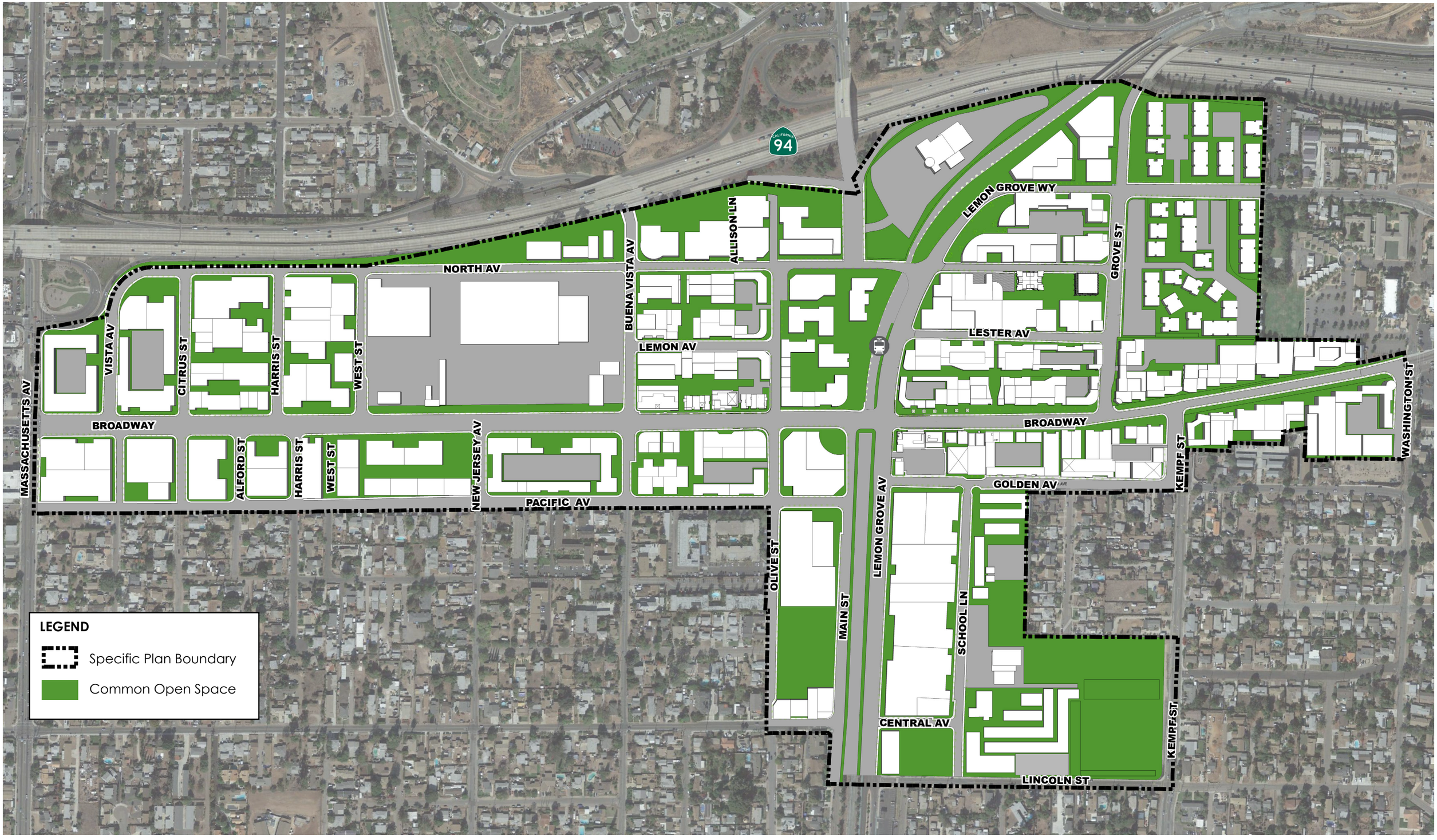
3 Reference list of historic properties in the General Plan.

4 Includes interior alterations and additions and exterior restoration retaining the same architectural style including roof and siding materials, window treatments and other exterior architectural features.

5 Includes any exterior alteration inconsistent with the historic architectural style of the building or a demolition of a historic structure.

4.10.2 OPEN SPACE

Open space standards are included in the development standards tables associated for each of the Zoning Districts. **Figure 4.10 (Open Space Map)** is a visual representation of how the open space standards could be realized within the Specific Plan area. This figure reflects how open space could potentially be organized and located and is not a projection of final design.


CALIFORNIA
94
NORTH AV
BUENA VISTA AV
ALLISON LN
LEMON GROVE WY
GROVE ST
LESTER AV
LEMON AV
VISTA AV
CITRUS ST
HARRIS ST
WEST ST
BROADWAY
MASSACHUSETTS AV
ALFORD ST
HARRIS ST
WEST ST
NEW JERSEY AV
PACIFIC AV
OLIVE ST
MAIN ST
LEMON GROVE AV
SCHOOL LN
CENTRAL AV
GOLDEN AV
KEMPF ST
LINCOLN ST
WASHINGTON ST
LEGEND
Specific Plan Boundary
Common Open Space

4.10.3 OFF-STREET PARKING REQUIREMENTS

The off-street parking provisions listed in **Appendix B** shall determine the minimum number of parking spaces to be provided for each use. Parking standard reductions are listed within the development standards tables for each of the seven Zoning Districts. Modifications are permissible with a Planned Development Permit approved by the Planning Commission (Reference Municipal Code Section 17.28.030).

4.10.4 LAND USE DEVELOPMENT INTENSITY/DENSITY

The estimated potential land use development intensity/density is shown on **Figure 4.11 Land Use Intensity/Density Map** with further detail in **Table 4.10-1 Land Use Development Intensity/Density** below and in **Appendix E (Estimated Yield Map and Land use Intensity/Density Table by Block)**. **Figure 4.11** shows the areas that contain the highest intensity/density are included in the Village Commercial, Innovation, and Transit Mixed-Use Zoning Districts and generally located within approximately ¼ mile from the trolley station northwest of the intersection of Lemon Grove Avenue and Broadway. The Market and Economic Analysis that assessed the market for each land use in the near-, mid-, and long-term concluded that varying factors could strengthen or weaken the support for the various uses thus affecting absorption rates. Additional traffic analysis shall be required for development exceeding 75 percent of build out thresholds by District.

Appendix E includes a table and map with the anticipated intensity/density throughout the Specific Plan by specific land use areas within each Zoning District. This anticipated intensity/density or "coverage" is essentially what could be expected to be achieved at build out based on the current and projected demographics and overall composition of the plan area.

TABLE 4.10-1
LAND USE DEVELOPMENT INTENSITY/DENSITY

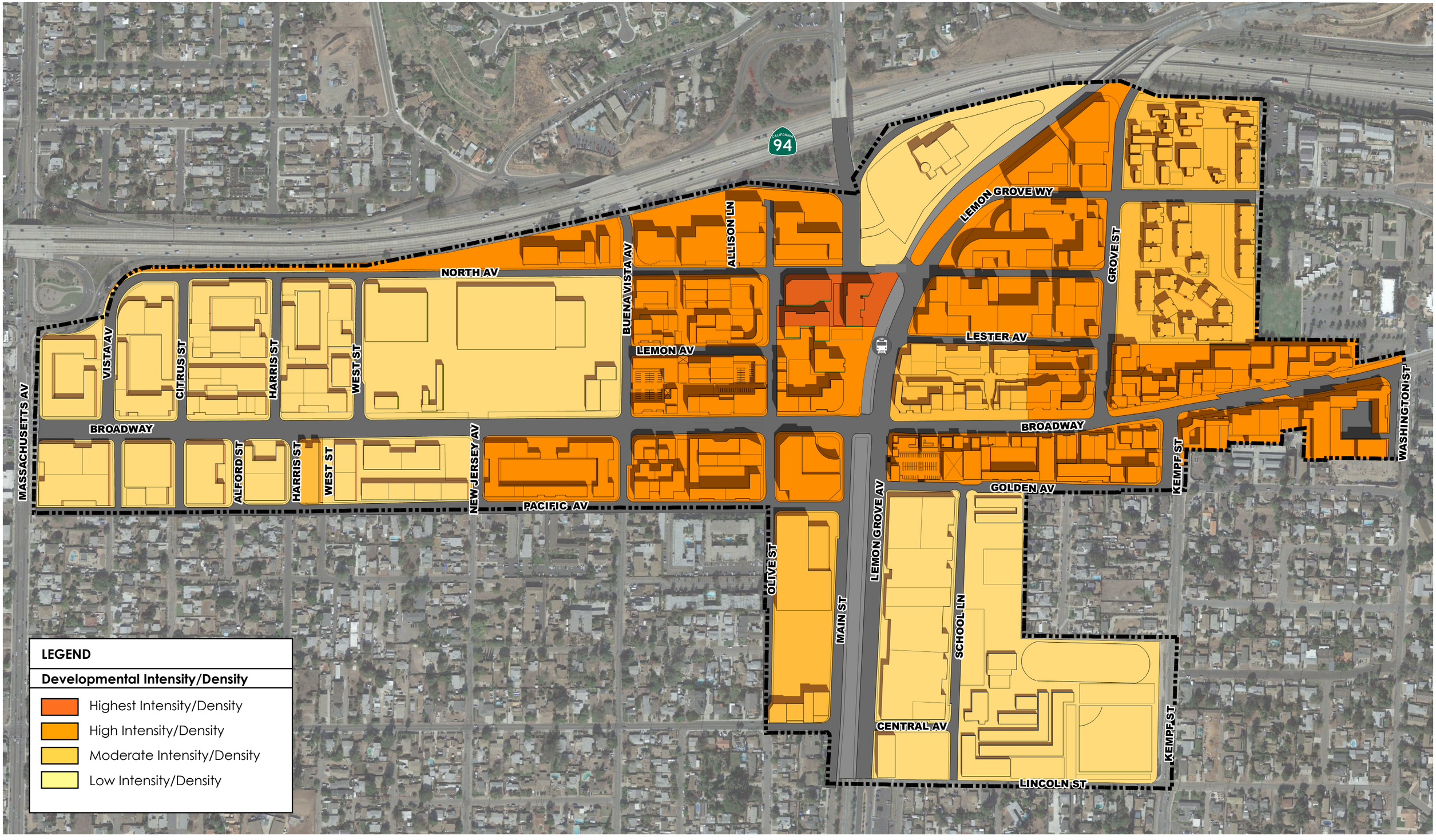
Zoning District	Land Uses	Acres*	Building Ht. (Stories)	Commercial SF[2]	Office SF[3]	Business SF[4]	Residential (du)
Village Commercial	Commercial, Office & Residential	21	3-5	755,367	641,203	–	821
Civic	Office	16	2	–	564,538	–	–
Neighborhood Commercial	Commercial	9	2	299,692	–	–	–
Transit Mixed-Use[1]	Commercial, Office, & Residential	35	3-7	919,984	703,056	–	1,373
Broadway Mixed-Use	Commercial, Residential	13	2	384,200	–	–	378
Innovation	Business	45	2-5	–	–	1,979,370	–
Med.- High Residential	Multi-Family Residential	14	3	–	–	–	75
Totals		152.5		2,379,243	1,908,797	1,979,370	2,647

**Acreages shown are exclusive of street rights-of-ways, parkland, open space, pedestrian corridors, etc.*

[1] Up to seven stories are only allowed in Land Use Area A-37, as shown on **Appendix E**.
[2] Includes commercial uses such as retail sales and services.
[3] Includes office uses such as a law firms, real estate, accounting and similar.
[4] Includes business uses such as administrative, professional office, light industry, medical, research and similar.

LAND USE INTENSITY MAP

FIGURE 4.11



5.0 MOBILITY

5.1 INTRODUCTION

The design of streets and public rights-of-way will act as a unifying element for development within downtown Lemon Grove. This chapter sets forth the standards and regulations for the future configuration of streetscapes to support all modes of transportation in a manner that maintains the clear flow of pedestrian, bike, and vehicular movement as the downtown area grows. A special emphasis will be on pedestrian usage to support a vibrant and enjoyable shopping and walking experience within downtown's unique atmosphere. The standards described in this chapter should be used as a conceptual planning tool for design and improvement cost estimating. Final design plans, specifications, and construction documents will be developed following the approval of the Specific Plan.

New streets, street extensions, and existing streets within the Specific Plan Area shall be improved according to the standards in this section when Street Improvements are required by either Title 12, Public Street Dedication and Improvements, Title 16, the Subdivision Ordinance, of the Lemon Grove Municipal Code or as specified in the Zoning Districts in this Specific Plan. Where direction is not provided by the Specific Plan, the provisions of the City's Municipal Code and General Plan shall prevail.

5.2 FUNCTIONAL ROADWAY CLASSIFICATIONS

Figure 5.2-1, Roadway Circulation Plan, includes seven roadway classifications that are based upon function. These classifications are described below. Three of the roadway classifications, Village Promenade, East Broadway, and Mixed-Use Promenade are "Special Treatment Areas" due to their complexity and importance to downtown (as shown in **Figure 5.2-1**). The City may consider supporting the creation of a Business Improvement District (BID), Property Based Improvement District (PBID) or Community Facilities District (CFD) that includes parcels located within close proximity to these three Special Treatment Areas. The **Truck Route Map, Figure 5.2-2,** helps to divert some of the truck traffic away from the Village Promenade/Special Treatment Area. Cross sections and standards tables are provided for each roadway classification. It should be noted that modifications to the cross sections and standards may be necessary if future traffic engineering studies determine specific roadway and intersection geometry need to be modified to safely accommodate intended users. Right-of-way dedication may be required of any individual development project to achieve the necessary road standards; however, a primary goal of specific street designs herein was to minimize requirements for land dedications from property owners. Other primary goals included expanding pedestrian and bicycle corridors, safe crossings and facilities; ensuring emergency access needs are met; providing for truck routes and loading areas; and providing appropriate lane widths for vehicle safety and visibility.

It should also be noted that the raised median locations are to be determined with future street traffic studies with ultimate street improvement construction drawings subject to substantial conformance review by the Development Services Director and approval by the City Engineer.

5.2.1 TRAFFIC MITIGATION IMPROVEMENTS

All improvements and construction mitigation described in the mitigation monitoring program for the certified Mitigated Negative Declaration for this Specific Plan shall be included in future street design and construction. Also, all public improvements in Section 6.3.3 of this Specific Plan shall be considered and implemented where feasible as a part of new street design and construction.

5.2.2 IN-LIEU IMPROVEMENTS

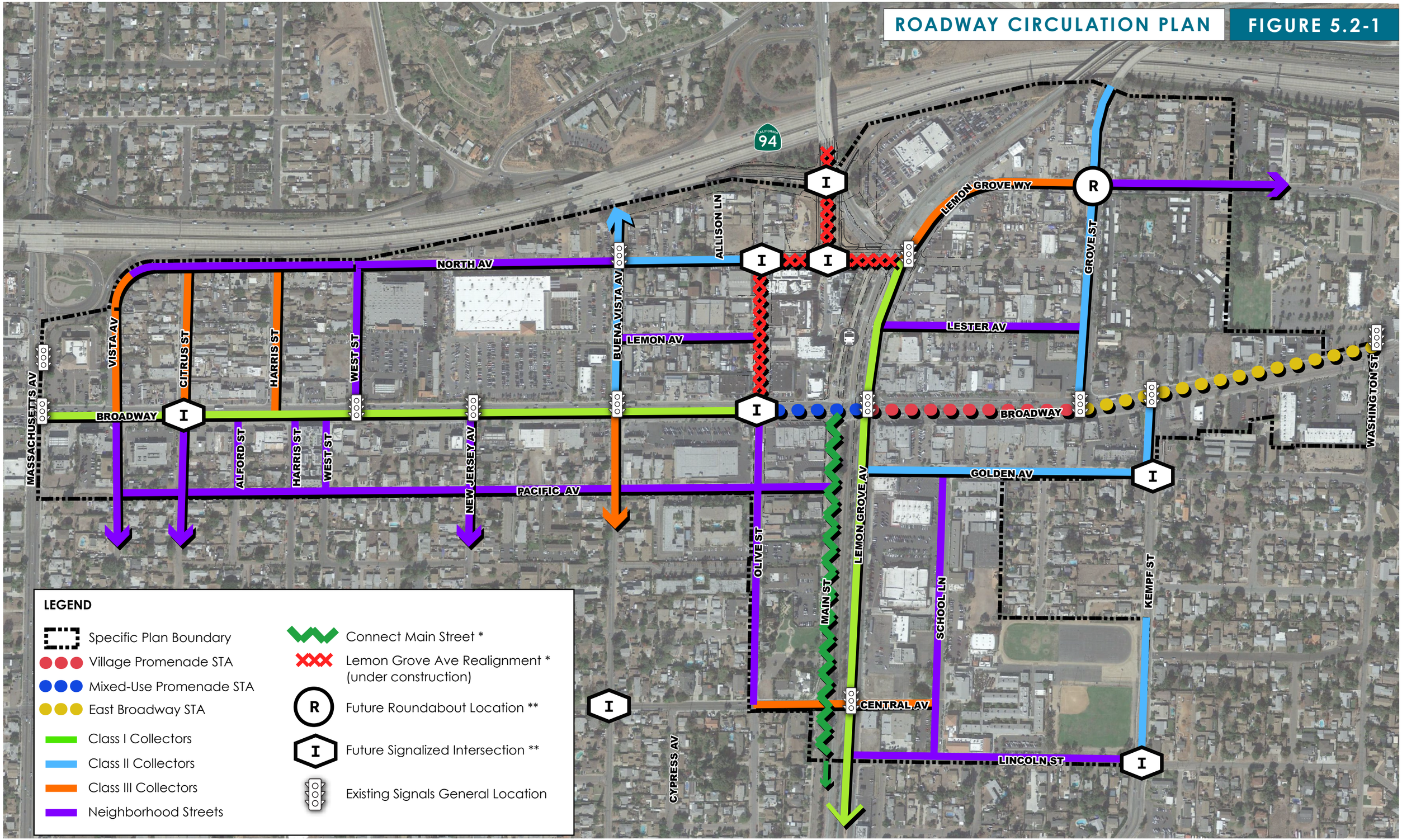
In-lieu of providing immediate street frontage design and construction improvements, and/or related public park and/or sign improvements, in-lieu improvements of equivalent value may be provided. Equivalent value may be calculated by dividing the street frontage of the project property from the total street frontages within the Downtown Specific Plan area, less street frontages for public lands, and multiplying the total by the Downtown Specific Plan Public Improvement Costs (DSPPIC) (as described in Chapter 6 – Implementation) plus 10 percent (to compensate credits towards corner lots). For purposes of calculating the equivalent value, the street frontage of the project property for corner lots shall only include their longest lot line fronting the street. Where the City Engineer finds that immediate street frontage improvements are infeasible due to requirements for full improvements along a block face, improvements of equivalent value may be provided as described herein at the discretion of the developer. Improvements of equivalent value shall be prioritized as followed (in order):

- Lemon Grove Avenue Realignment Special Treatment Area (including gateway sign and utility undergrounding)
- Main Street Promenade (including park improvements)
- Village Promenade Special Treatment Area
- East Broadway Special Treatment Area
- Pacific Avenue Park (including design, construction plans and related park improvements)
- Kunkel Park Expansion
- Civic Center Park (park improvements)
- Mixed Use Promenade Special Treatment Area
- Connect Main Street Special Treatment Area (Broadway to Central)
- Class I Collector Streets (Broadway then Lemon Grove Ave.)
- Class II Collector Streets (Bicycle Sections)
- Class II Collector Streets (Parking Sections)
- Class III Collector Streets
- Neighborhood Streets

Improvements and amenities within each prioritized area shall be to the satisfaction of the Development Services Director and City Engineer such that they prioritize improvements and amenities that energize downtown and improve public safety. Funds shall be created for improvement priority areas as needed. A City Council resolution may be adopted to amend these priorities or to provide direction on proposed improvements and amenities.

ROADWAY CIRCULATION PLAN

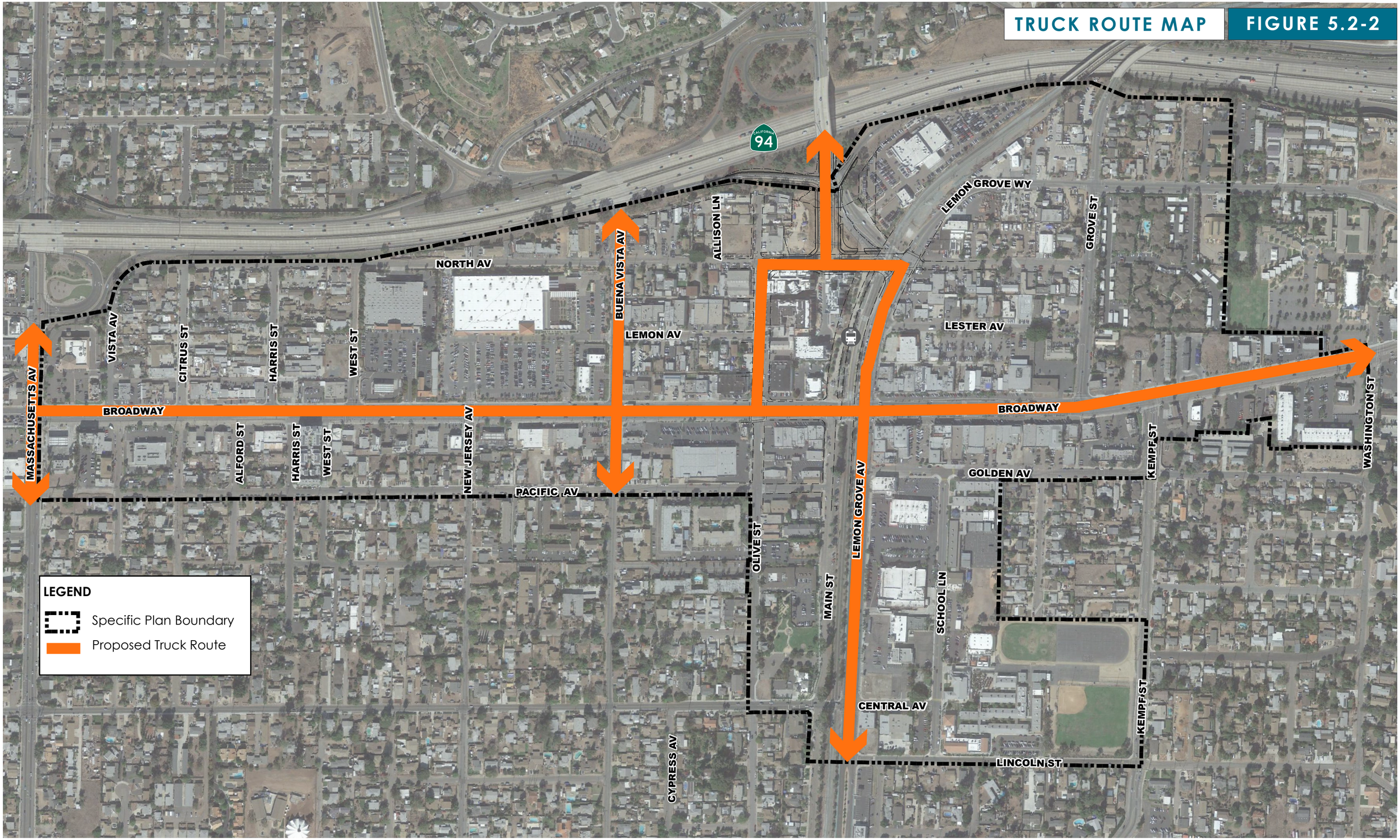
FIGURE 5.2-1



*As approved by City of Lemon Grove. **Implementation subject to future feasibility analysis as deemed appropriate by city staff.

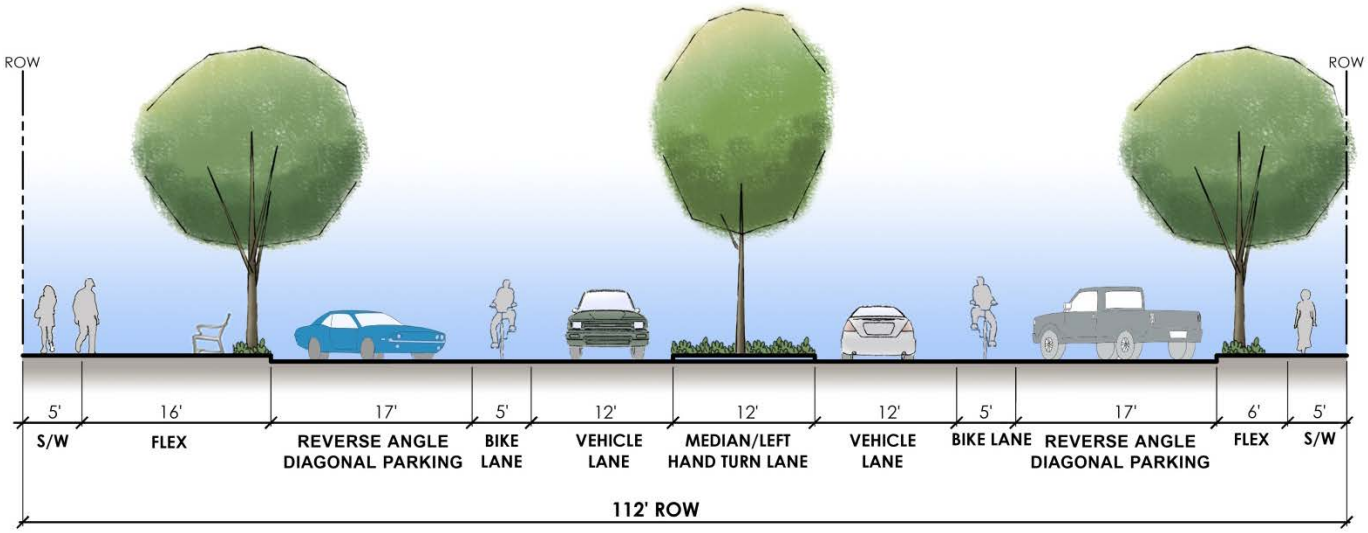
TRUCK ROUTE MAP

FIGURE 5.2-2



VILLAGE PROMENADE SPECIAL TREATMENT AREA: This two-lane truck route and roadway includes Broadway east of Lemon Grove Avenue and west of Grove Street. The Village Promenade Special Study Treatment Area is illustrated on **Figure 5.2-3** and **Table 5.1** includes the streetscape standards. This roadway will function as the City's "main street" by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

FIGURE 5.2-3 VILLAGE PROMENADE SPECIAL TREATMENT AREA CROSS SECTION



Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping. Flex zone may be reduced where right-of-way width is deficient.

Table 5.1
VILLAGE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

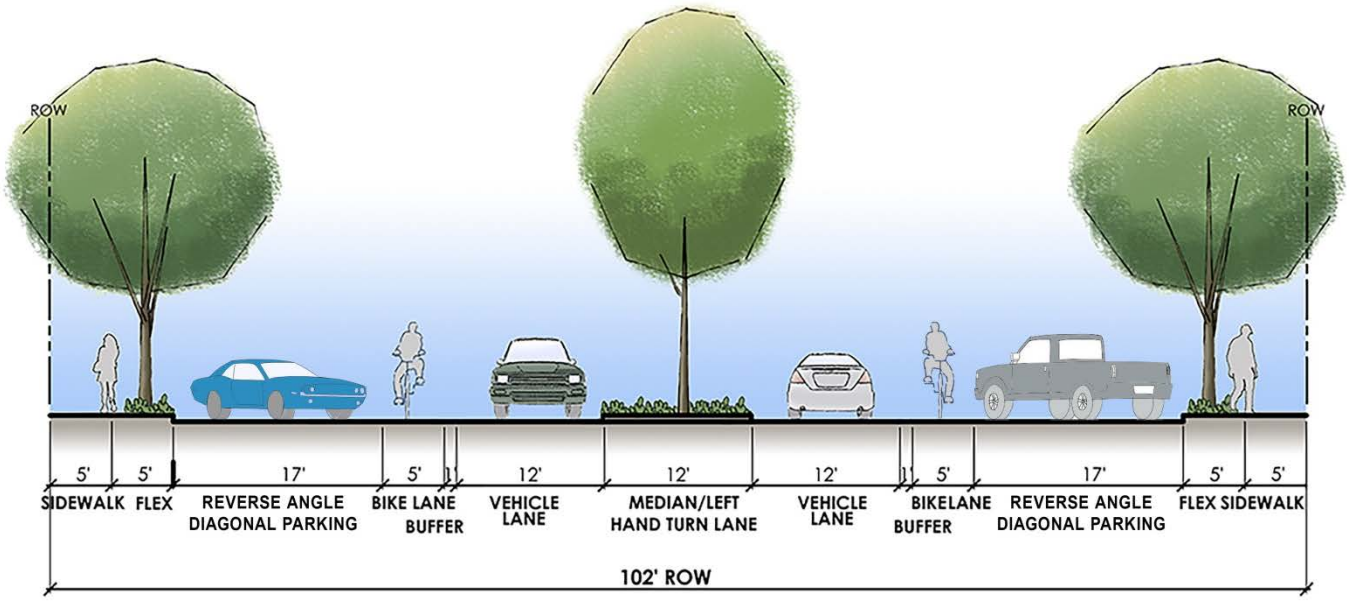
Number of Travel Lanes	One 12' lane in each direction
On-Street Parking	30 degree reverse angle diagonal parking on both sides; Diagonal parking areas shall include shade tree islands as a part of the wheel stops encroaching into the parking zone. Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Reverse angle diagonal parking shall be provided for bicycle safety. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	12'; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.
Bike Facility	5' Class II bike lane. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways.
Sidewalk (S/W)	5'; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	16' north side and 6' south side; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 25'); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 100'); bicycle repair stations (1 per 500'); required utility infrastructure; retail, information and service kiosks, outdoor dining and cafes

Table 5.1
VILLAGE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

	(including beer and wine sales in a partially fenced area); trash and recycle receptacles (1 of each per 100'); water drinking fountains and/or features (1 per 500'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 500'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district. Allow for bicycle and skateboarding sharing facilities.
Street Trees	1 per 25' of frontage (See Table 5-10).
	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part. Provide electrical outlets at the top and bottom of street lights and street lights across the street at midpoints connecting streets during street closure events and providing opportunities for outdoor lighting across the vehicular lanes of the street.
Other Required Improvements	The following improvements shall be required: signalized intersections (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Traffic calming shall be required at the transition for vehicles heading eastbound on Broadway past Lemon Grove Avenue. The centerline of the street shall be considered the center of the existing median. Include bollards at each end to allow for street closures. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Chapter 6.

EAST BROADWAY SPECIAL TREATMENT AREA: This two-lane truck route and roadway includes Broadway east of Grove Street and west of Washington Street. The East Broadway Special Treatment Area is illustrated on **Figure 5.2-4** and **Table 5.2** includes the streetscape standards. This roadway will function as a continuation of the City's "main street" by providing access to a growing and lively pedestrian-oriented shopping/dining area and high levels of pedestrian amenities.

FIGURE 5.2-4 EAST BROADWAY PROMENADE SPECIAL TREATMENT AREA CROSS SECTION



Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping.

Table 5.2
EAST BROADWAY SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

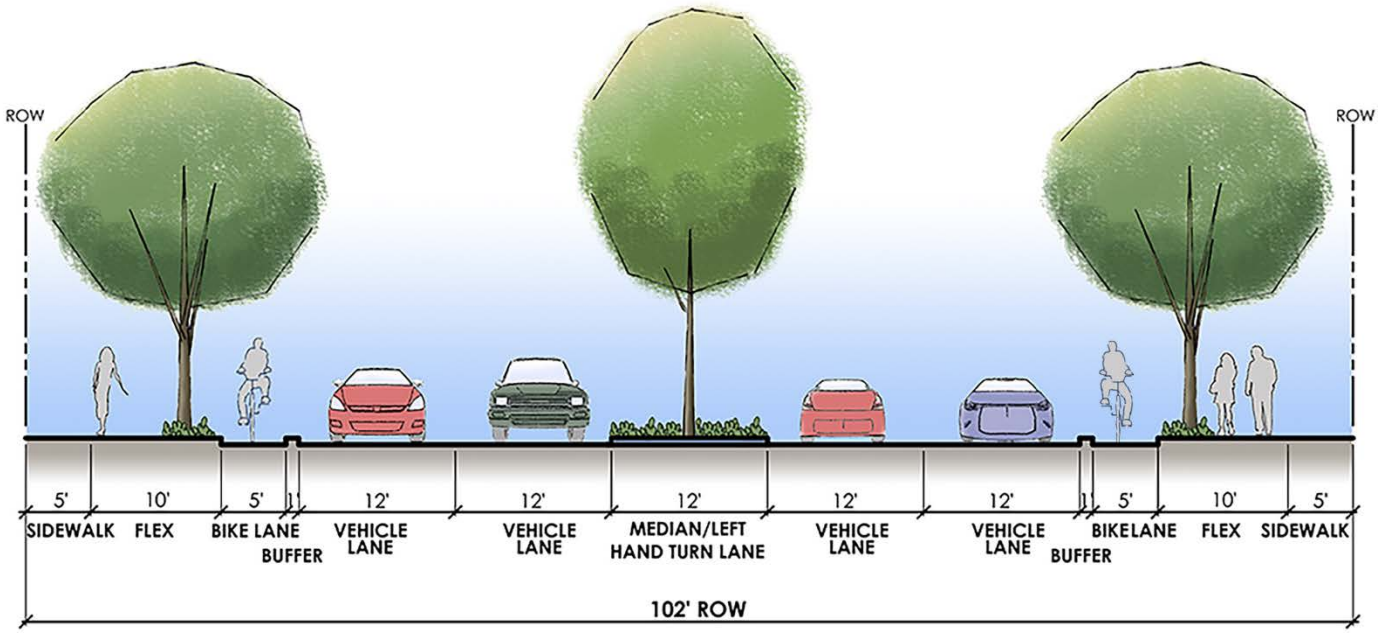
Number of Travel Lanes	One 12' travel lane in each direction.
On-Street Parking	30 degree reverse angle diagonal parking on both sides; Diagonal parking areas shall include shade tree islands as a part of the wheel stops encroaching into the parking zone. Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Reverse angle diagonal parking shall be provided for bicycle safety. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	12'; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.
Bike Facility	5' Class II bike lane with a 1' buffer. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways.
Sidewalk (S/W)	5'; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5'; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 25'); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 100'); bicycle repair stations (1 per 500'); required utility infrastructure; retail, information and service kiosks, outdoor dining and cafes (including beer and wine sales in a

Table 5.2
EAST BROADWAY SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

	partially fenced area); trash and recycle receptacles (1 of each per 100'); water drinking fountains and/or features (1 per 500'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 500'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district.
Street Trees	1 per 25' of frontage (See Table 5-10). Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part. Provide electrical outlets at the top and bottom of street lights and street lights across the street at midpoints connecting streets during street closure events and providing opportunities for outdoor lighting across the vehicular lanes of the street.
Other Required Improvements	The following improvements shall be required: signalized intersections (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum), bike lanes (4' minimum), bike lane buffers (0' minimum), parking (7' minimum), and median (12' minimum) improvements. The centerline of the street shall be considered the center of the existing median. Include bollards at each end to allow for street closures. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2.

MIXED-USE PROMENADE SPECIAL TREATMENT AREA: This four-lane truck route and roadway includes Broadway west of Lemon Grove Avenue and east of Olive Street. The Mixed-Use Promenade Special Study Treatment Area is illustrated on **Figure 5.2-5** and **Table 5.3** includes the streetscape standards. This roadway, similar to the Village Promenade Special Treatment Area, will function as a critical multimodal street segment, however with greater capacity and stronger connections to the nearby trolley station.

FIGURE 5.2-5 MIXED-USE PROMENADE SPECIAL TREATMENT AREA CROSS SECTION



Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping.

Table 5.3
MIXED-USE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

Number of Travel Lanes	Two 12’ travel lanes in each direction
On-Street Parking	No. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	12’; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.
Bike Facility	5’ Class II bike lane with 1’ vehicular buffer on each side. Bike lane buffers shall include white hatching. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways.
Sidewalk	5’; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	10’; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 25’); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 100’); bicycle repair stations (1 per 500’); required utility infrastructure; retail, information and service kiosks, outdoor dining and cafes (including beer and wine sales in a partially fenced area); trash and recycle receptacles (1 of each per 100’); water drinking fountains and/or

Table 5.3
MIXED-USE PROMENADE SPECIAL TREATMENT AREA STREETSCAPE STANDARDS

	features (1 per 500'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 500'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district. Allow for bicycle and skateboarding sharing facilities.
Street Trees	1 per 25' of frontage (See Table 5-10). Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part. Provide electrical outlets at the top and bottom of street lights and street lights across the street at midpoints connecting streets during street closure events and providing opportunities for outdoor lighting across the vehicular lanes of the street.
Other Required Improvements	The following improvements shall be required: signalized intersections (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 on the west side of the trolley tracks); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum), bike lanes (4' minimum), bike lane buffers (0' minimum), parking (7' minimum), and median (12' minimum) improvements. Include bollards at each end to allow for street closures. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).

CLASS I COLLECTOR: Designated truck route and roadway that provides a multi-modal four-lane roadway with a median and left turn lanes. The Class I Collector is illustrated on **Figure 5.2-6** and **Table 5.4** includes the streetscape standards. The primary function is to move significant volumes of people across town in a variety of travel modes. Vehicular traffic on these throughways tends to be relatively fast and continuous and transit service is often frequent. These streets should have a comfortable pedestrian realm with significant pedestrian amenities and public spaces. Access to adjacent properties is a secondary function, driveway entrance and exit points should be limited.

FIGURE 5.2-6 CLASS I COLLECTOR CROSS SECTION

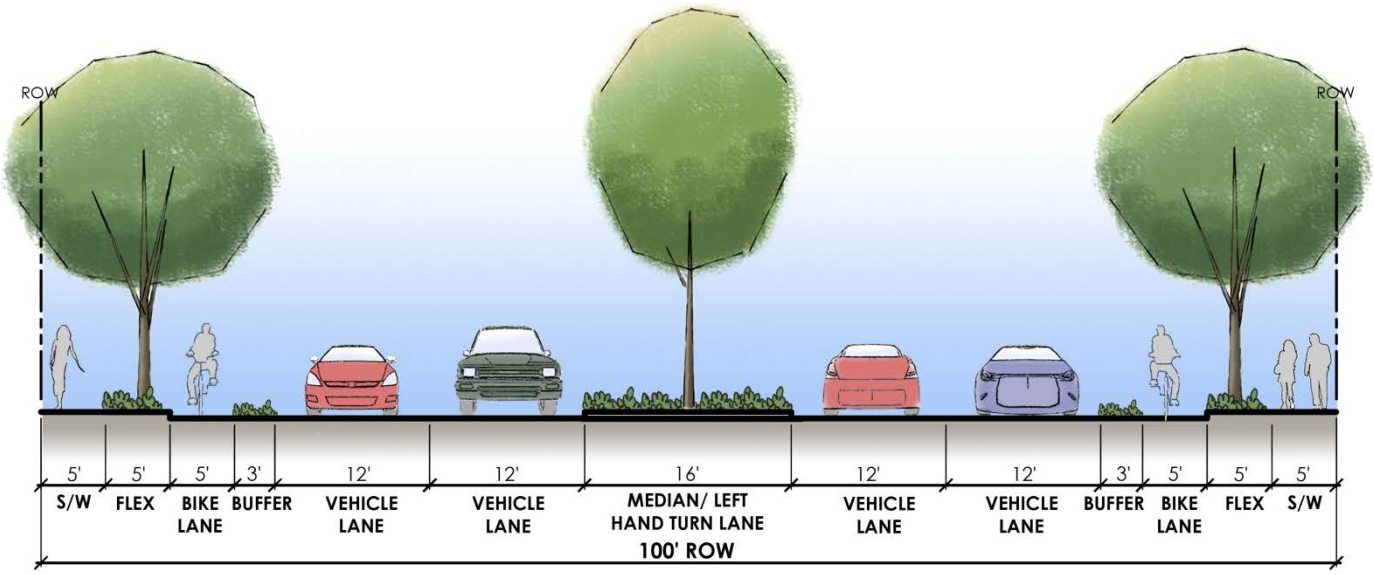


Table 5.4
CLASS I COLLECTOR STREETSCAPE STANDARDS

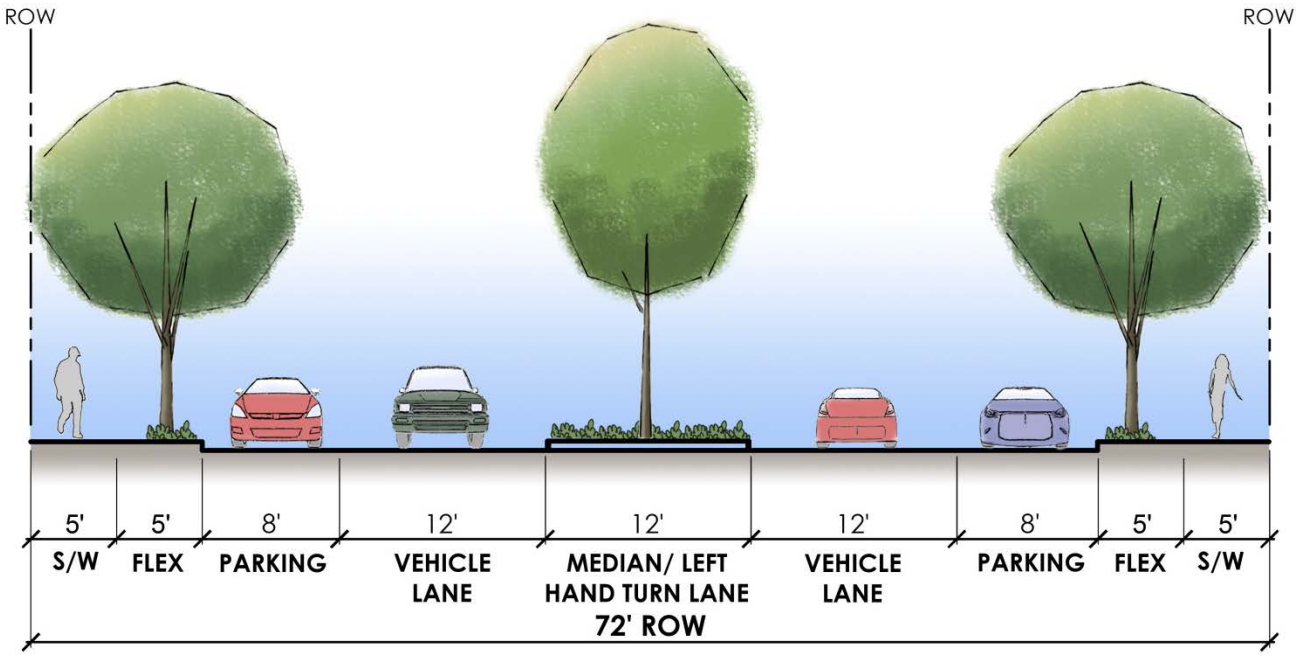
Number of Travel Lanes	Two 12’ travel lanes in each direction
On-Street Parking	N/A. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	16’; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.. The median shall be used as a pedestrian island where mid-block crossings are a part.
Bike Facility	5’ Class II bike lane with 3’ vehicular buffer on each side. Bike lane buffers shall include curbed buffers with landscape or art when it does not create a traffic concern, otherwise, white hatching shall be provided. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways.
Sidewalk (S/W)	5’; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5’; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 25’); traffic, wayfinding and gateway signage; bicycle, skateboard

Table 5.4
CLASS I COLLECTOR STREETSCAPE STANDARDS

	and scooter storage racks (1 per 100'); bicycle repair stations (1 per 500'); required utility infrastructure; retail, information and service kiosks, outdoor dining and cafes (including beer and wine sales in a partially fenced area); trash and recycle receptacles (1 of each per 100'); water drinking fountains and/or features (1 per 500'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 500'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district.
Street Trees	1 per 25' of frontage (See Table 5-10).
	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part.
Other Required Improvements	The following improvements shall be required: signalized intersections (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum), bike lanes (4' minimum), bike lane buffers (0' minimum), and median (12' minimum) improvements. All streets and alley vehicular ways shall be improved to support the load of emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).

CLASS II COLLECTOR: Designated truck route and roadway that provides a two-lane multi-modal roadway with a two-way center left turn lane and either parallel parking or biking facilities. The Class II Collector is illustrated on **Figures 5.2-7** and **5.2-7.1** and **Table 5.5** includes the streetscape standards. Class II Collectors are designed to carry two lanes of traffic at lower volumes and slower speeds than the Class I Collectors and provide access to adjacent properties. The cross sections below reflect the two options of either parallel parking or biking facilities.

FIGURE 5.2-7 CLASS II COLLECTOR PARKING CROSS SECTION



Note: Applies to Buena Vista Avenue (north of Broadway), North Avenue (between Buena Vista and Olive Street), and Golden Avenue.

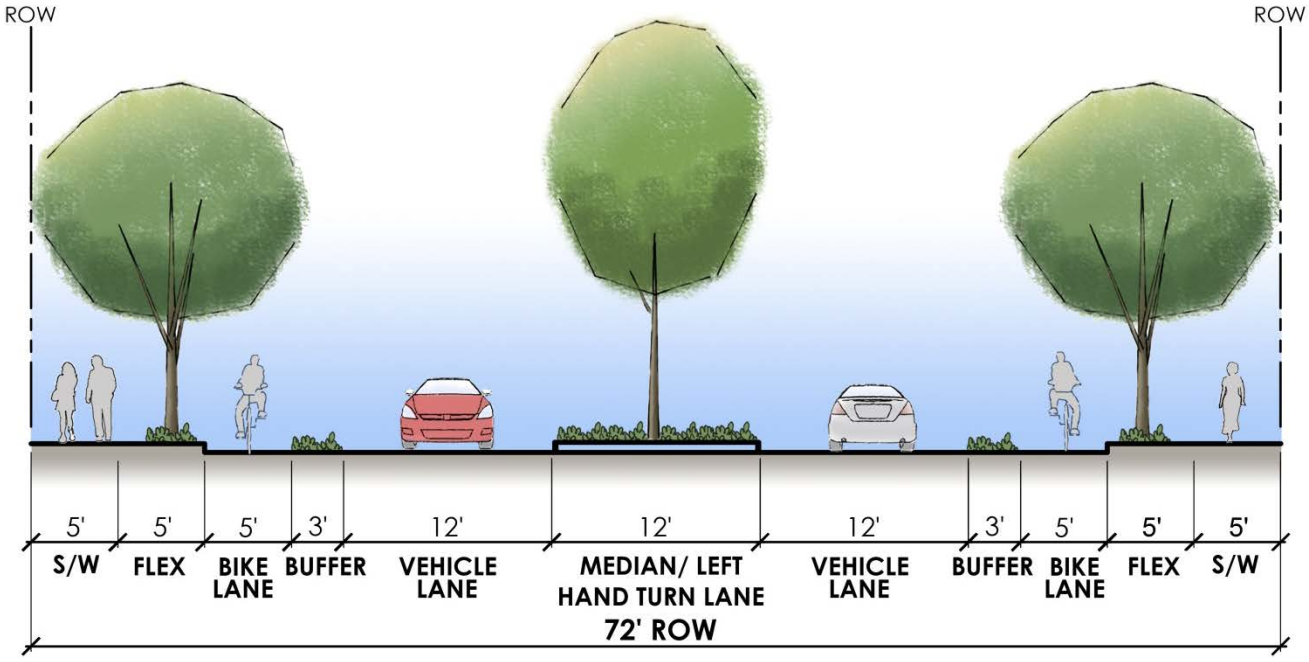
Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping.

On Buena Vista Avenue, parking on both sides shall not be allowed and a 12’ two-way exclusive left turn lane shall be provided. No median will be included on Buena Vista.

North Avenue shall require a 12’ two-way left turn lane exclusively. No median will be included on North.

Golden Avenue shall provide 17’ wide 30 degree reverse angle parking along the north side of Golden Avenue with 5’ sidewalks on both side of the street, a 4’ flex zone, and 12’ vehicular lanes on both sides of the street with a 12’ left hand turn lane. No parking or bike lane shall be provided on the south side of Golden Avenue. No median will be included on Golden Avenue unless approved by the Fire Marshal.

FIGURE 5.2-7.1 CLASS II COLLECTOR BICYCLE CROSS SECTION



Note: The above cross section applies to Grove Street and Kempf Street. Kempf Street shall include a 6' bicycle lane on each side in lieu of the 5' bicycle lane and 3' buffer.

Note: Median shall have rolled curb and one (1) foot strip of Fire Department approved landscaping. Additional fire protection is required as a part of adjacent building design where access widths are between 18' and 20'.

Table 5.5
CLASS II STREETSCAPE STANDARDS

Number of Travel Lanes	1 12' travel lane in each direction
On-Street Parking	Parallel or No Parking. Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	12'; Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.. The Fire Marshal shall approve all median improvements.
Bike Facility	5' Class II bike lane with 3' vehicular buffer on each side, bike shared lane markings (sharrows), or no bike lane. Bike lane buffers shall include curbed buffers with landscape or art when it does not create a traffic or fire access concerns, otherwise, white hatching shall be provided. Bike lanes shall be colored green or brown. Dashed colored bike lanes shall be provided through intersections and driveways. Bike shared lane markings (sharrows) shall be a part of vehicle lanes when no Class II bike lane is provided.
Sidewalk (S/W)	5'; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5'; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 100'); traffic, wayfinding and gateway signage; bicycle , skateboard

Table 5.5
CLASS II STREETSCAPE STANDARDS

	and scooter storage racks (1 per 200'); required utility infrastructure; trash and recycle receptacles (1 of each per 200'); water drinking fountains and/or features (1 per 1000'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 1000'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district.
Street Trees	1 per 30' of frontage (See Table 5-10)
	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part.
Other Required Improvements	The following improvements shall be required: signalized intersections and roundabouts (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum), bike lanes (4' minimum), bike lane buffers (0' minimum), parking (7' minimum), and median (12' minimum) improvements. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).

CLASS III COLLECTOR: Designated truck route and roadway that provides a two-lane undivided multi-modal roadway which primarily distributes traffic to and from Class I and Class II Collectors and allows access to adjacent properties. The Class III Collector is illustrated on **Figure 5.2-8** and **Table 5.6** includes the streetscape standards.

FIGURE 5.2-8 CLASS III COLLECTOR CROSS SECTION

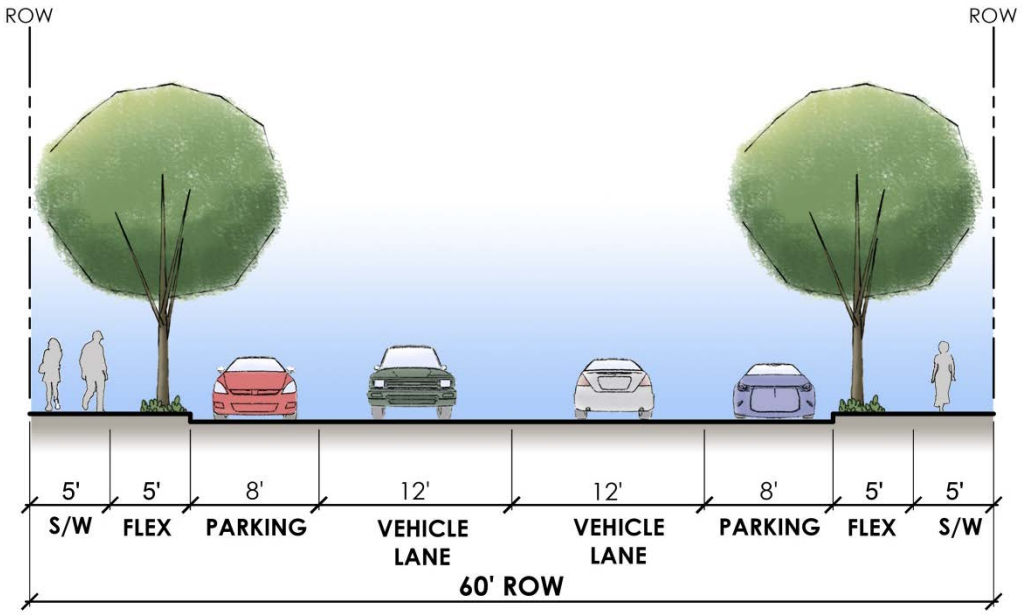


Table 5.6
CLASS III STREETSCAPE STANDARDS

Number of Travel Lanes	One 12’ travel lane in each direction
On-Street Parking	Parallel; Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	No
Bike Facility	Class III Bike facility. Bike shared lane markings (sharrows) shall be a part of vehicle lanes.
Sidewalk (S/W)	5’; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5’; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 100’); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 200’); required utility infrastructure; trash and recycle receptacles (1 of each per 200’); water drinking fountains and/or features (1 per 1000’); postal drop boxes; newspaper stands; pet waste bag stations (1 per 1000’); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the

Table 5.6
CLASS III STREETSCAPE STANDARDS

	zoning district.
Street Trees	1 per 30‘ of frontage (See Table 5-10).
	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25‘ of frontage. Dual head pedestrian scale lighting min. 12’ high per City standard. Banner posts and decorative themes are required as a part.
Other Required Improvements	The following improvements shall be required: signalized intersections and roundabouts (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500’ minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4’ minimum), bike lanes (4’ minimum) and parking (7’ minimum) improvements. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).

NEIGHBORHOOD STREETS: Designated roadways that provide a two-lane undivided multi-modal roadway which primarily distributes traffic to and from Class III Collectors and allows access to adjacent properties. The Class III Collector is illustrated on **Figure 5.2-9** and **Table 5.7** includes the streetscape standards.

FIGURE 5.2-9 NEIGHBORHOOD STREETS CROSS SECTION

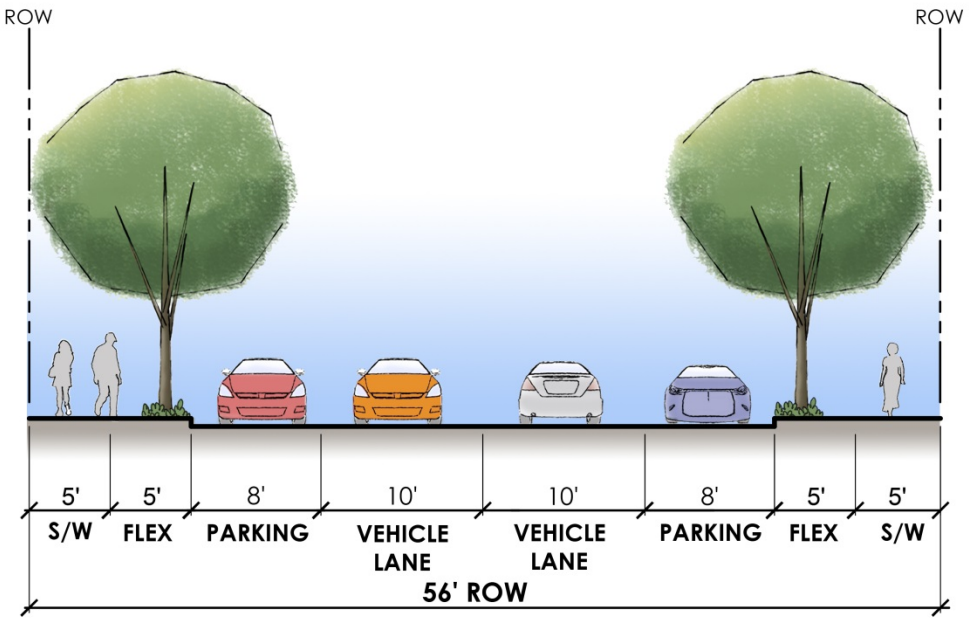


Table 5.7
NEIGHBORHOOD STREET STREETSCAPE STANDARDS

Number of Travel Lanes	1 10’ travel lane in each direction
On-Street Parking	Parallel; Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	N/A
Bike Facility	Class III Bike facility. Bike shared lane markings (sharrows) shall be a part of vehicle lanes.
Sidewalk (S/W)	5’; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5’; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 100’); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 200’); required utility infrastructure; trash and recycle receptacles (1 of each per 200’); water drinking fountains and/or features (1 per 1000’); postal drop boxes; newspaper

Table 5.7

	stands; pet waste bag stations (1 per 1000'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district.
Street Trees	1 per 30' of frontage (See Table 5-10).
	Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part.
Other Required Improvements	The following improvements shall be required: signalized intersections and roundabouts (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum) and parking (7' minimum)improvements. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and construction of improvements and amenities shall be per Section 5.2.2. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).
Prioritization	If sufficient right-of-way is not available, street improvements shall be prioritized as follows: 1) vehicle lanes; 2) sidewalks; 3) flex zones; and 4) parking.

LEMON GROVE AVE REALIGNMENT: A unique roadway classification resulting from the special design considerations of the Lemon Grove Avenue Realignment.

Along Olive Street, between Broadway and North Avenue designated truck route providing a two-lane multi-modal roadway with a two-way center left turn lane. The Lemon Grove Ave Realignment Olive Street cross section consists of: 5' sidewalk, 5' flex zone, 8' parking zone, 12' vehicle lane, 12' two-way left turn lane, 12' vehicle lane, 5' flex zone, and 5' sidewalk. **Table 5.8** includes the streetscape standards.

Other street sections of the Realignment are undergoing final construction and design classification shall be per the approved street improvement plans.

Table 5.8
LEMON GROVE AVE REALIGNMENT OLIVE STREET STREETSCAPE STANDARDS

Number of Travel Lanes	One 12' travel lane in each direction
On-Street Parking	Parallel; Bulb outs shall be included along parking edges and fire access areas and shall be improved with pedestrian furnishings and amenities, landscape and shade trees. Pedestrian bulb outs shall be placed at all intersections. Except for ADA persons with disabilities parking spaces, no on-street parking spaces shall be designated for a specific use.
Median/Left Hand Turn Lane	12' two-way left turn lane only. Medians shall be placed where fire lanes and left hand turn lanes are not required and shall include gateway, wayfinding and traffic signs, curbs, landscape, shade trees and public art.
Bike Facility	Class III Bike facility. Bike shared lane markings (sharrows) shall be a part of vehicle lanes.
Sidewalk	5'; Colored and textured concrete consistent with the architectural style is required. Excess right-of-way shall be improved with expanded or meandering sidewalks, parkettes, open space, landscape, shade trees, and art.
Flex	5'; The following improvements shall be included within the flex zone: street trees, street lighting, bus shelters; street furniture (1 bench per 100'); traffic, wayfinding and gateway signage; bicycle, skateboard and scooter storage racks (1 per 200'); required utility infrastructure; trash and recycle receptacles (1 of each per 200'); water drinking fountains and/or features (1 per 1000'); postal drop boxes; newspaper stands; pet waste bag stations (1 per 1000'); shade structures; parklets, parkettes and paseos; and art and color, material, and texture flatwork differentiation consistent with architectural styles within the zoning district.
Street Trees	1 per 30' of frontage (See Table 5-10). Fire Review and approval shall be required for proposed trees between emergency access lanes (includes public streets and alleys) and building faces.
Street Lighting	1 per 25' of frontage. Dual head pedestrian scale lighting min. 12' high per City standard. Banner posts and decorative themes are required as a part.
Other Required Improvements	The following improvements shall be required: signalized intersections and roundabouts (existing intersections shall be upgraded to current pedestrian safety standards); signalized mid-block cross walks with colored and textured concrete (1 per 500' minimum or portion thereof); pavement striping; and traffic calming structures. Existing curb lines that are more than 50 percent of the block face shall be retained and, in such instances, improvements and widths of street sections shall be measured from the curb lines on either side of the street and not the centerline. Measuring from the curb line may require reduced widths for flex zones (4' minimum), bike lanes (4' minimum), bike lane buffers (0' minimum), parking (7' minimum), and median (12' minimum) improvements. All streets and alley vehicular ways shall be improved to support emergency and trash disposal apparatus (estimate 75,000 pounds). Fair Share contributions shall be per Chapter 4. Engineering estimates shall be in accordance with Chapter 6 (reference Downtown Specific Plan Public Improvement Costs or DSPPIC). Prioritization of design and

Table 5.8
LEMON GROVE AVE REALIGNMENT OLIVE STREET STREETSCAPE STANDARDS

	construction of improvements and amenities shall be per Chapter 6. Within the Art and Entertainment Overlay, art shall be incorporated into the public right-of-way (e.g., crosswalks, sidewalks, gateways signs, wayfinding signs, benches, etc.).

CONNECT MAIN STREET (STA IX): General Plan Special Treatment Area (STA) IX is an approximate two-mile-long linear corridor immediately west of the Orange Line of the MTS trolley system that runs along Main Street from Broadway to Massachusetts Avenue and then to the south end of the City through the Massachusetts Avenue Trolley Station and behind the residences on the east side of San Altos Place.

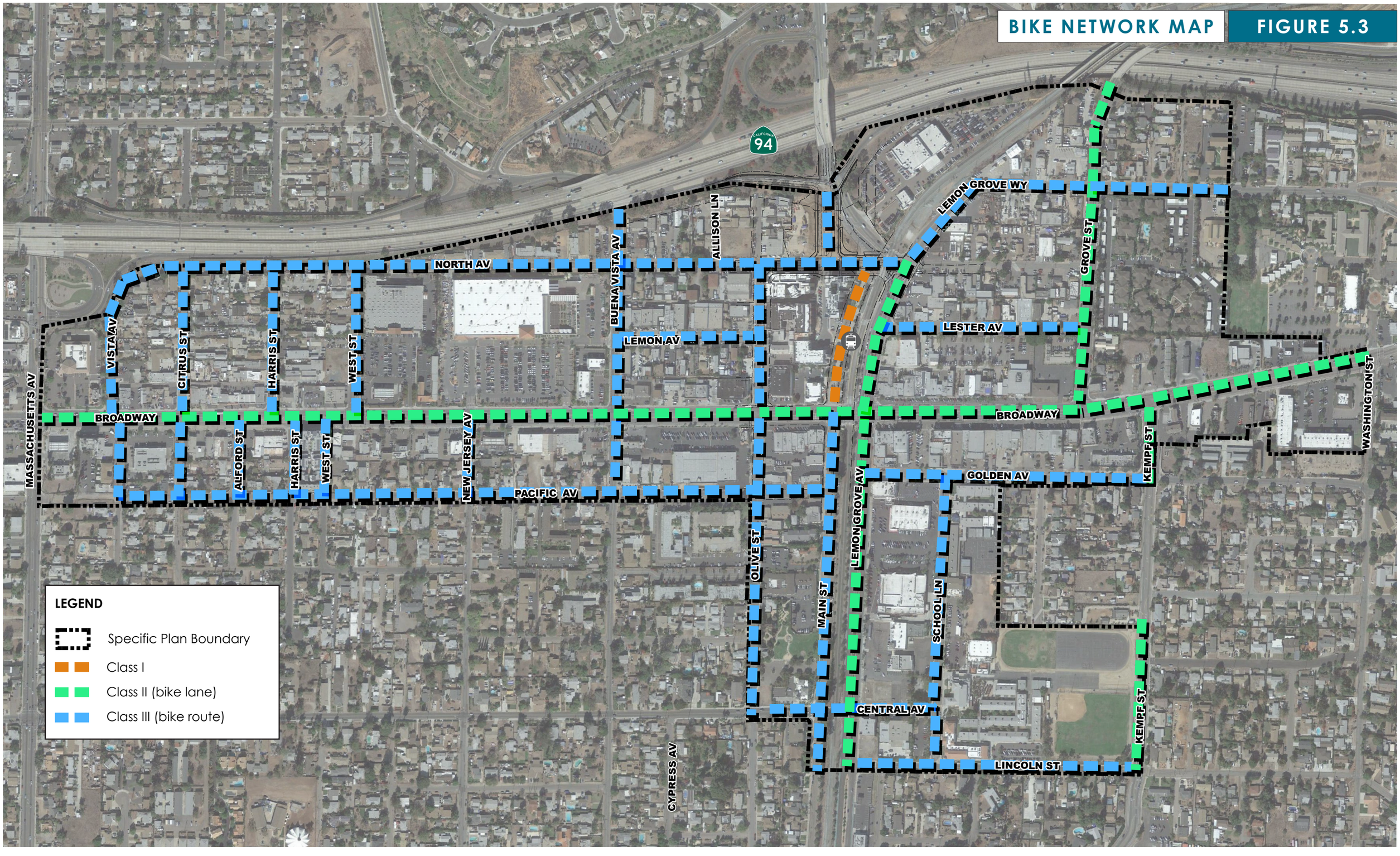
STA IX includes walking and biking paths and park related activity areas as described in the General Plan. Key segments in the corridor, such as the area between Broadway and Central Avenue, will have the potential for temporary full street closures for special community events provided appropriate access to nearby properties are retained. The project site includes six themes in a chronological arrangement that span the length of the two-mile corridor. The themes are an extension of the past, present, and future theme of the existing Main Street Promenade Park with a goal to go back in time from the 1900's to prehistoric times as you travel from the north end to the south end respectively. The theme between Broadway and Central Avenue is the Early Pioneer Period. Future improvements are required to conform to the approved theme and conceptual drawings dated October 2016. Thirty percent construction drawings are complete.

5.3 BIKE NETWORK MAP

Bike Network Map, Figure 5.3, provides a blueprint for encouraging bicycling as a safe and healthy mode of travel in Lemon Grove. This Plan seeks to enhance and expand the existing bikeway network, connect gaps, address constrained areas, provide for greater local and regional connectivity, and encourage even more residents to bicycle. Bicycle facilities, storage and repair stations are addressed in the parking, development and street design standards.

BIKE NETWORK MAP

FIGURE 5.3

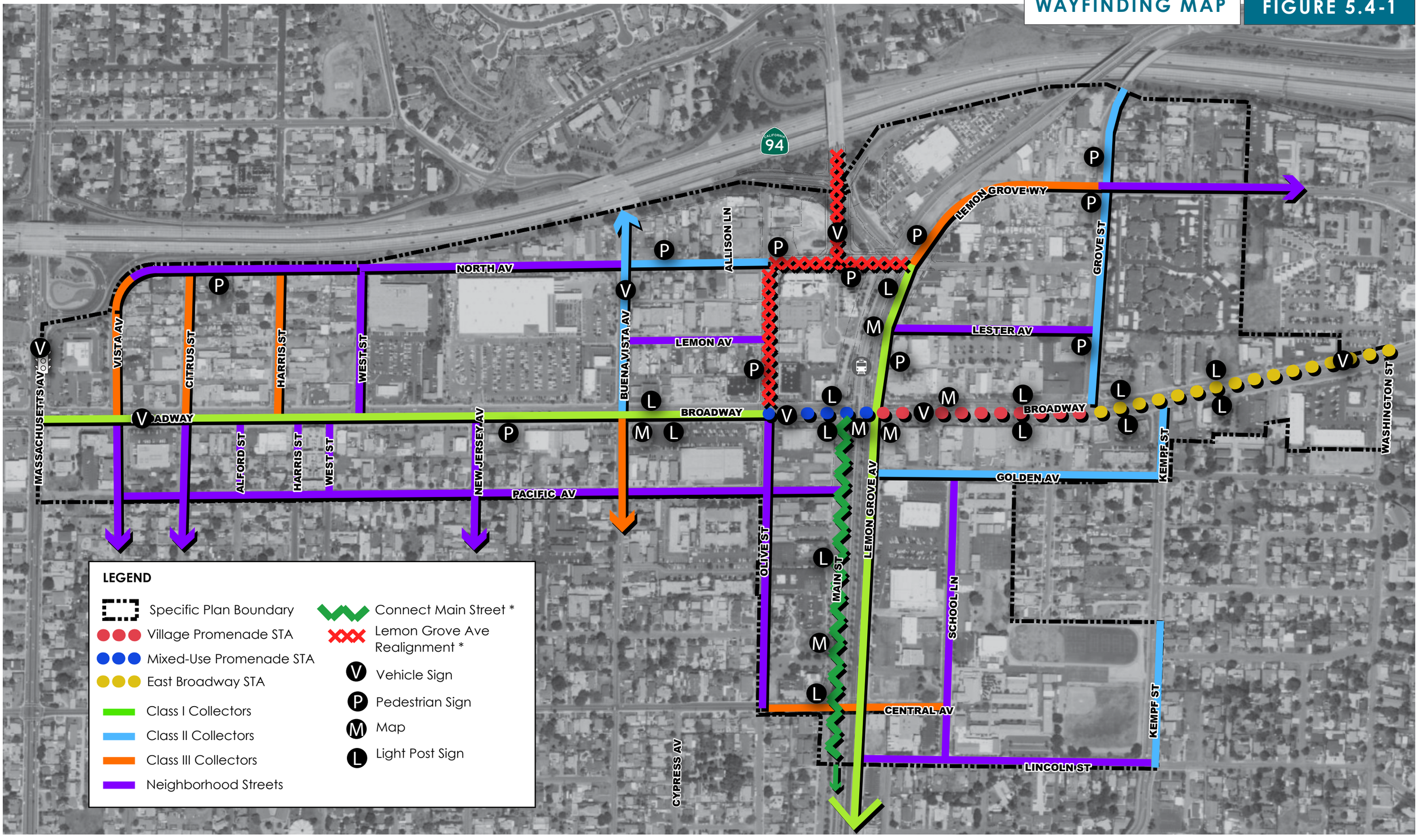


5.4 WAYFINDING AND GATEWAYS

Wayfinding Map, Figure 5.4-1, and the **Gateways Map, Figure 5.4-2,** include the potential locations for potential wayfinding and gateway signage. Wayfinding and gateway signage help to visually characterize and promote future development into its given location. These signs will also help to connect the different Zoning Districts within the Specific Plan area. The **Sample Wayfinding Signs, Figure 5.4-3**, and the **Sample Gateway Signs, Figure 5.4-4**, include a list of sample wayfinding and gateway sign types for future improvement costs estimating purposes only. Future wayfinding and gateway sign locations and improvements shall require City Council approval prior to installation.

WAYFINDING MAP

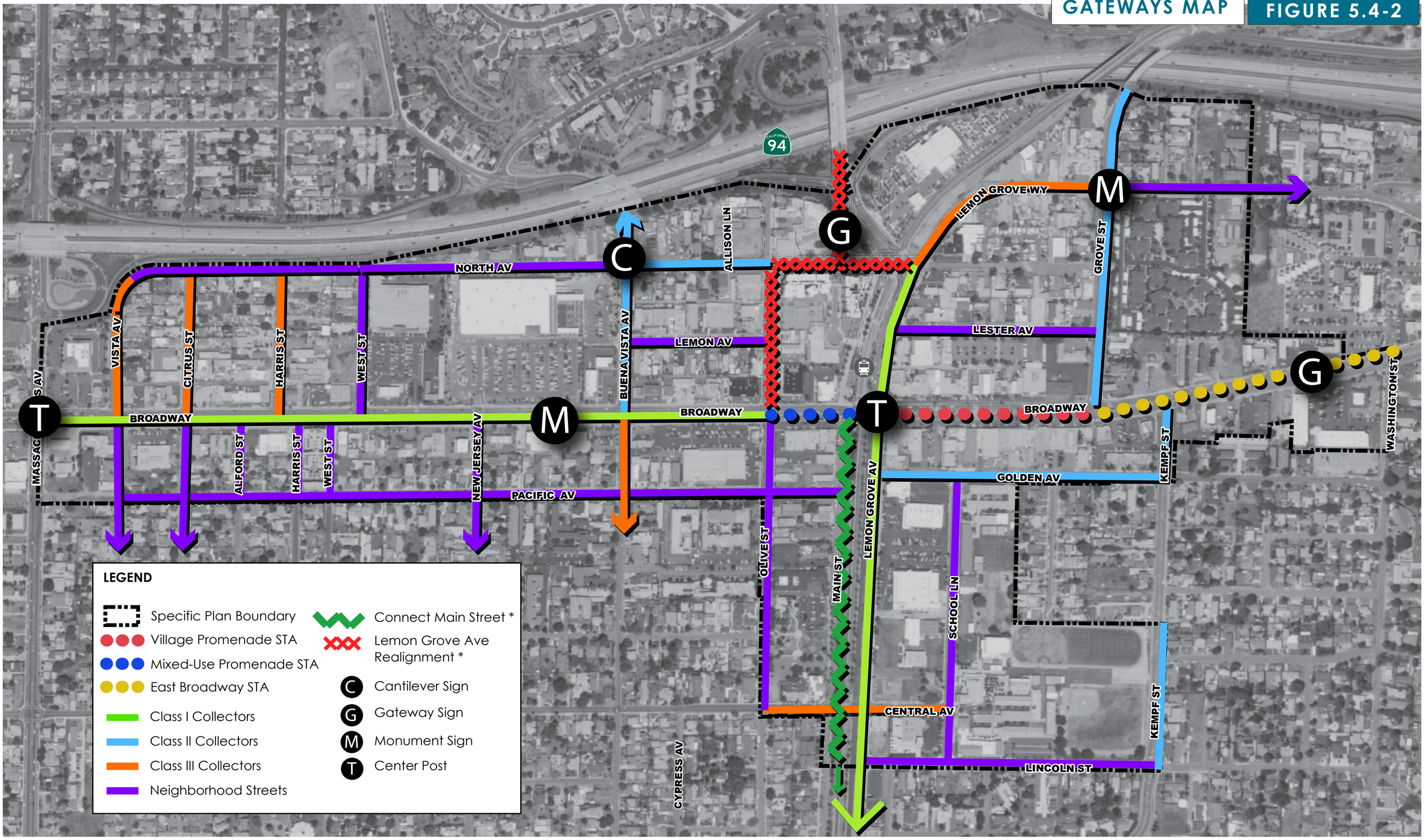
FIGURE 5.4-1



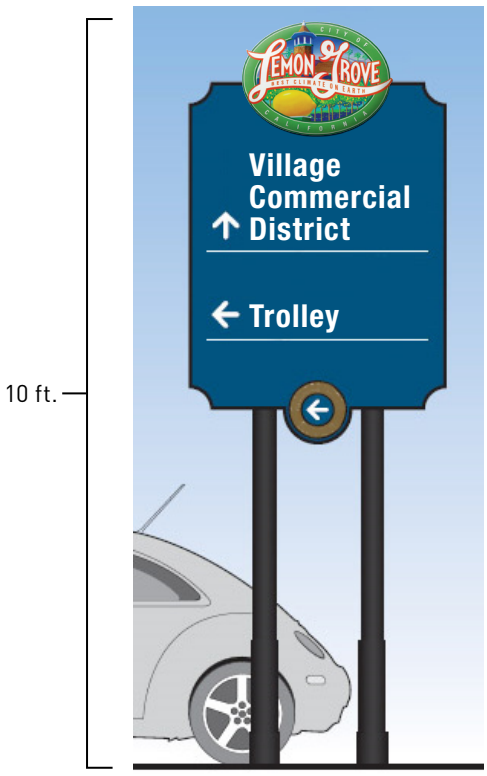
*As approved by City of Lemon Grove.

GATEWAYS MAP

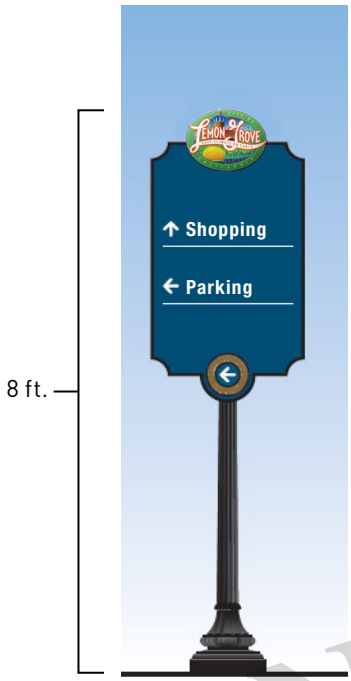
FIGURE 5.4-2



*As approved by City of Lemon Grove.

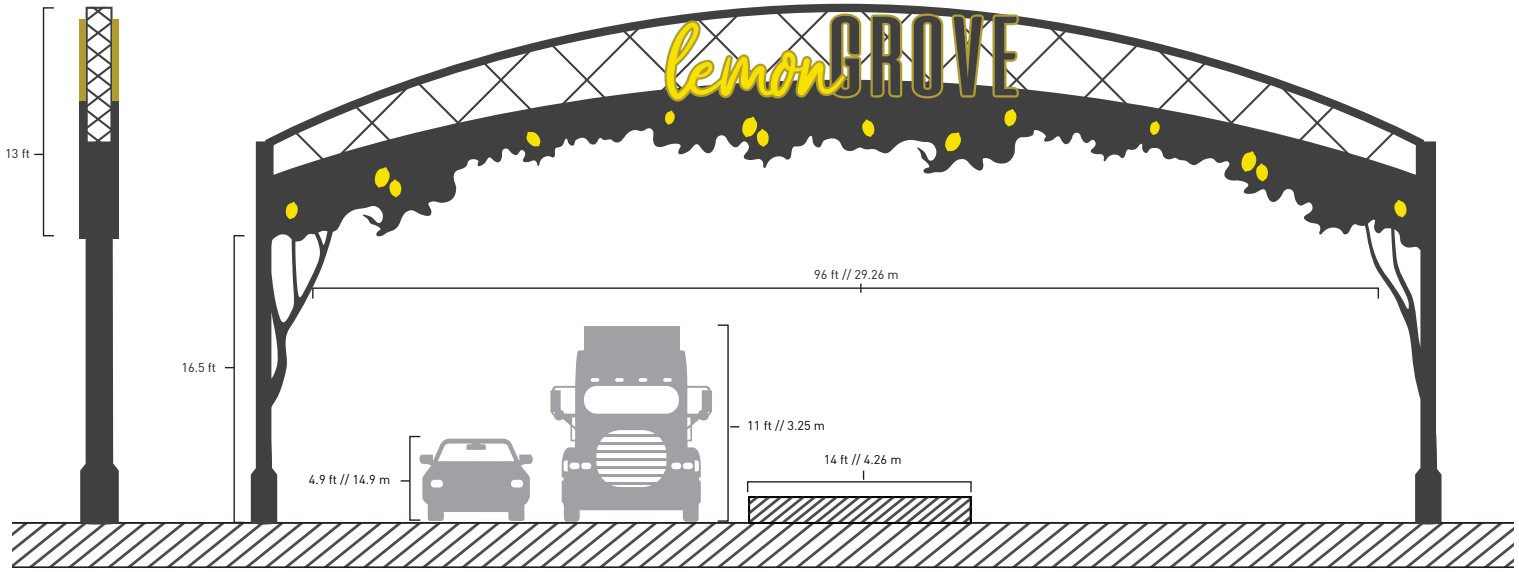


Vehicle Sign (V)

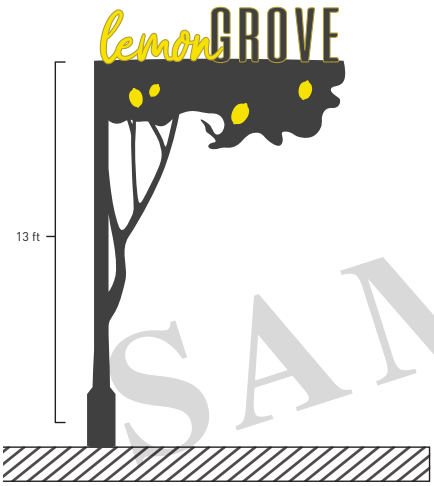


Pedestrian Sign (P)

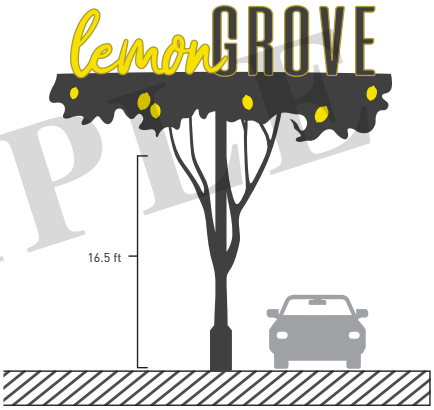
Map (M) Light Post Sign (L)



Gateway Sign (G)



Cantilever (C)



Center Post (T)

Monument (M)

Color Palette

Materials

The backdrop to the words 'Lemon Grove' would be made from mid-toned bronze-colored material, allowing the bright yellow of the letters to stand out against the blue sky or any other backdrop. An earthier feeling would be given to the tree canopy and trunk elements by being made from a material coated with the darker antique bronze finish. The lemons located in the canopy of the tree would be made from a yellow acrylic allowing light to pass through them during the day; and at night, the lemons would be illuminated from the inside of the sign with hidden lights wrapped around them to make them glow.

SOURCE:
CITY OF LEMON GROVE & SAGE PROJECT/MOLLY MANCUSO

5.4.1. COMPREHENSIVE SIGN PROGRAM

Gateway and Wayfinding signs are an important element of the urban streetscape. In addition to providing valuable identifying information, these signs also help to anchor a community's identity and create a sense of place as they welcome visitors to the City, promote greater accessibility and public safety . This significance requires that signage be thoughtfully designed and complementary of other streetscape elements. To ensure high quality and cohesive signage throughout the City, a comprehensive sign program shall be adopted by the City Council within six months after the Downtown Village Specific Plan's adoption by the City Council and incorporate the characteristics and materials as described in Table 5.9 into its designs with consideration to the sample wayfinding and gateway signs.

Table 5.9
SIGN PROGRAM STANDARDS

Gateway Signs	
Min. Height	17’
Min. Width	96’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Cantilver Entry Signs	
Min. Height	16’
Min. Width	8’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Center Entry Post Signs	
Min. Height	16’
Min. Width	12’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Monument Entry Signs	
Min. Height	10’
Min. Width	10’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Vehicle Wayfinding Signs	
Min. Height	10’
Min. Width	4’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Pedestrian Wayfinding Sign	
Min. Height	8’

Table 5.9
SIGN PROGRAM STANDARDS

Min. Width	3’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Wayfinding Map Sign	
Min. Height	7’
Min. Width	3.5’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles
Light Post Wayfinding Sign	
Min. Height	12’
Min. Width	3.5’
Sign Post Materials	Steel; Wrought Iron; Cast Iron
Sign Materials	Steel; Wrought Iron; Cast Iron; Aluminum and Aluminum Composite; Wood, Treated Wood and Synthetic Wood Blends; Stone and River Rock; Brick; Concrete; Durable Tiles

5.5 STREET TREES AND PLANTING STANDARDS

In order to promote continuity of the major street corridors within the Specific Plan, a list of approved street trees is provided in **Table 5.10**. Larger, and/or alternative species may be considered on a case-by-case basis subject to approval by the Development Services Director and Public Works Director with appropriate mitigation (e.g. Silva Cells). Street tree plantings must meet the standards outlined in **Table 5.11.**

Table 5.10
STREET TREES

Street	Approved Tree Type(s)	Approved Tree Type(s) in Medians
Lemon Grove Avenue	Hymenosporum Flavum / Sweetshade; Cassia Leptophylla / Gold Medallion Tree	Plantanus Racemosa / California Sycamore; Tipuana Tipu / Tipu Tree; Calistemon Viminalis / Weeping Bottlebrush Tree
Broadway (East of Lemon Grove Ave.)	Parkinsonia Aculeata / Mexican Palo Verde; Thevetia Thevetioides / Giant Thevetia	Prosopis Chilensis / Chilean Mesquite
Broadway (West of Lemon Grove Ave.)	Tipuana Tipu / Tipu Tree; Cassia Leptophylla / Gold Medallion Tree	Brachychiton Acerifolius / Flame Tree; Calistemon Viminalis / Weeping Bottlebrush Tree
Lemon, & North Avenues	Rhus Lancia / African Sumac; Agonis flexuosa / Peppermint	N/A
Kempf Street	Parkinsonia Aculeata / Mexican Palo Verde; Calistemon Viminalis / Weeping Bottlebrush Tree	Prosopis Chilensis / Chilean Mesquite
Olive Street	Olea Europaea 'Wilsonii' / Fruitless Olive	N/A
Lemon Grove Way	Prosopis Chilensis / Chilean Mesquite; Parkinsonia Aculeata / Mexican Palo Verde	N/A
Grove Street	Callistemon Viminalis / Weeping Bottle Brush	Tipuana Tipu / Tipu Tree
Main Street	Plantanus Racemosa / California Sycamore; Pinus Pinea / Italian Stone Pine; Quercus Suber / Cork Oak	Plantanus Racemosa / California Sycamore; Pinus Pinea / Italian Stone Pine; Quercus Suber / Cork Oak
Alford, Citrus, Harris, New Jersey, & West Streets	Lagerstroemia Indica / Crape Myrtle; Handroanthus impetiginosus / Pink Trumphet Tree; Hymenosporum Flavum / Sweetshade	N/A
Central, Golden, Lester Avenues; School Lane; Lincoln Street	Eriobotrya deflexa / Bronze Loquat; Albizia Julibrissin / Silk Tree	N/A
Pacific Avenue	Lagerstroemia Indica / Crape Myrtle; Olea Europaea 'Wilsonii' / Fruitless Olive	N/A
Lester Avenue	Cassia Leptophylla / Gold Medallion Tree; Ulmus Parvifolia / Chinese Elm	N/A

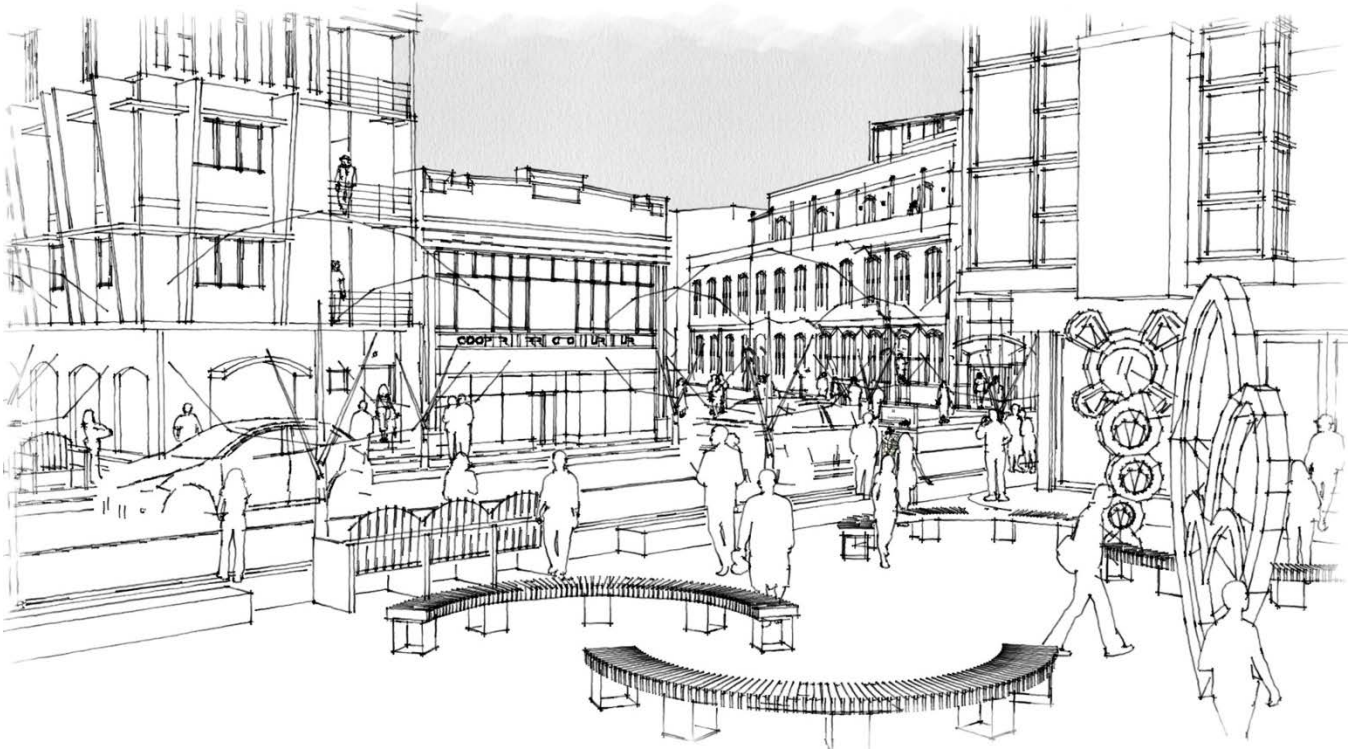
Table 5.11
STREET TREE AND PLANTING STANDARDS

Minimum Size	24" to 36" box (minimum 2" trunk diameter & 10' height at time of planting). Minimum 25' wide diameter canopy and 20' height for street trees after 20 years of planting.

Table 5.11
STREET TREE AND PLANTING STANDARDS

Other Requirements	1) Tree planting and irrigation shall be per Chapter 18.44 of the Lemon Grove Municipal Code. 2) Landscape palettes shall be complementary of the above tree requirements including hardscape and rockscape. 3) Tree grates shall be required per City standard with durable uplighting on each side of the base of the grate. 4) Provide covered electrical outlets at tree wells to allow for seasonal ornamental LED "twinkle lighting" with white colored lights.

6.0 IMPLEMENTATION AND ADMINISTRATION



6.1 INTRODUCTION

This Chapter provides an overview of the approaches necessary to implement this Specific Plan. Implementation strategies establish a necessary link between the "Vision" for Downtown and the resources available to achieve that vision. Implementation requires a coordinated program of public and private action. The City of Lemon Grove's policy initiatives, regulatory controls, administrative programs, and capital investment in the area lay a foundation for future private sector investment on the part of property owners, business enterprise, and other area stakeholders. This chapter consists of two major sections:

- ***SPECIFIC PLAN ADMINISTRATION:*** Outlines the administrative procedures that are necessary to implement the Specific Plan.
- ***RECOMMENDED PROGRAMS AND PUBLIC IMPROVEMENTS:*** Identifies the physical and programmatic improvements that are recommended to carry out the goals of the Specific Plan.

6.2 SPECIFIC PLAN ADMINISTRATION

This section describes the procedures required for the timely implementation of development within the Specific Plan area. Upon adoption of this Specific Plan, all land use regulations and development standards of this Specific Plan shall supersede those of the City's Municipal Code. All provisions of the Municipal Code not addressed by this Specific Plan shall apply, including, but not limited to, use and planned development permits, variance, public notice and hearing, and appeals provisions.

CLARIFICATION OF AMBIGUITY

If ambiguity arises concerning the appropriate classification of a use within the meaning and intent of this Specific Plan, or if ambiguity exists with respect to matters of height, yard requirements, area requirements, or land use and zoning boundaries as established herein, the remedies provided in the Municipal Code for interpretations shall govern.

STATUTORY AUTHORITY IN CASE OF CONFLICTING PROVISIONS

Nothing in this Specific Plan shall be deemed to affect, annul or abrogate any ordinances pertaining or applicable to the properties and areas affected by this Specific Plan unless superseded with this Specific Plan. If a conflict does arise, the more restrictive requirements shall control.

FINDINGS REGARDING THE SPECIFIC PLAN

No division of land, use permit, site plan approval or other entitlement for use, and no public improvement shall be authorized in the Specific Plan area unless the proposed project is found to be in substantial compliance with the vision, goals, objectives, and policies of this Specific Plan.

Approval of final development plans and use permits shall be contingent upon a determination of substantial compliance with the applicable provisions of this Specific Plan, applicable provisions of the Municipal Code, and the City of Lemon Grove's General Plan as a part of Planning Division reviews.

SITE PLAN APPROVAL

To ensure compliance with all applicable requirements of this Specific Plan, all development projects (unless specifically exempt) shall be subject to the applicable compliance, review and approval process set forth in the Municipal Code.

ADMINISTRATIVE MODIFICATIONS

Minor modifications (less than 20 percent deviation and/or deviation in tree species, building materials or colors) to the development and design standards of this Specific Plan and/or land use deviations substantially in conformance and consistent with permitted uses of the zone the property is located in may be approved, or conditionally approved, by the Development Services Director upon demonstration that the proposed adjustment would enhance the overall appearance and function of the project; would be compatible with, and would not be detrimental to adjacent property or improvements; would provide equivalent benefits in accordance with Section 17.28.030(D) of the Municipal Code if applicable; and would advance the vision, goals, objectives and policies of this Specific Plan.

PLANNED DEVELOPMENT PERMIT AND VARIANCE MODIFICATIONS

Modifications, other than administrative modifications, to the development and design standards of this Specific Plan may be approved, or conditionally approved, by the Planning Commission and/or designated commission or committee through the Planned Development Permit process in accordance with Section 17.28.030(D) of the Municipal Code. Variances for all other modifications may be approved by the Planning Commission and/or designated commission or committee in accordance with Section 17.28.060 of the Municipal Code. Planned Development Permit and Variance modifications require an additional finding be made that the modification would advance the vision, goals, objectives and policies of this Specific Plan.

AMENDMENTS TO THE SPECIFIC PLAN

Development, land use and design standards of this Specific Plan may be amended through a Zoning Amendment in accordance with Section 17.28.080 of the Municipal Code provided an additional finding be made that the amendment would advance the vision and goals of this Specific Plan. Other amendments to this Specific Plan, or any part thereof, may be amended or replaced in accordance with Section 17.28.090 of the Municipal Code.

SPECIFIC PLAN REVIEW/UPDATE

This Specific Plan shall be included in the General Plan Annual Progress Report monitoring review to assess the progress of the implementation of this Specific Plan's policies and the implementation program in Chapter 6.

6.3 RECOMMENDED PROGRAMS AND PUBLIC IMPROVEMENTS

To achieve the overall vision and individual goals of this Specific Plan, a variety of publicly initiated programs and physical improvements have been identified. This section describes each recommended program/improvement and identifies a series of funding mechanisms.

The successful economic revitalization of the Specific Plan area is predicated on the following three strategies:

1) Strengthen the identity of the area as a unique destination.
2) Create unique Planning Areas that provide a balanced mix of office, commercial and retail, and residential uses that support a vibrant downtown.
3) Broaden development opportunities and provide a wide variety of incentives (e.g., low fees, by-right zoning and five-story zoning).

The economic revitalization strategy has many interrelated components, described in Section 6.3.1.

6.3.1 ECONOMIC DEVELOPMENT PROGRAMS

DEVELOPMENT INCENTIVES AND FEES

Incentives (e.g., low fees, by-right zoning and five-story zoning)can increase the attractiveness of private investment and stimulate private development within the Specific Plan area. A number of possible incentive and fee measures have been identified as follows:

1. Allow additional density and modifications to development and design standards for lot consolidation and/or the provision of public community benefits.

2. Maintain low City fees for development within the Specific Plan area for Planning, Building, and Engineering divisions.
    a. Within nine months of Downtown Specific Plan adoption, or as soon as practical, prepare an Engineering Cost Estimate using existing metrics that analyzes all of the costs for design and construction of public improvements, including street, alley, intersection, park, and wayfinding and gateway sign improvements and amenities, within the entire Downtown Specific Plan area (Downtown Specific Plan Public Improvement Costs or DSPPIC). This includes undergrounding of all overhead utilities and the purchase of land and all associated improvements and amenities referenced in Chapter 5, as well as the purchase of land and all associated improvements and amenities for the park and parking overlays referenced in Chapter 4. The DSPPIC shall be increased annually from the date of adoption based on the last annual change of Prices in the San Diego Area, as measured by the Consumer Price Index for All Urban Consumers (CPI-U), as reported by the U.S. Bureau of Labor Statistics.

    b. Within three months of Downtown Specific Plan adoption, the City Engineer and Development Services Director shall develop a map of prospective Community Facility

Districts (CFDs). The City shall require new developments to not oppose the formation of CFDs for each zoning district or planning area similar to the Main Street Promenade CFD. The City shall initiate the formation of CFDs after agreements not to oppose result in majority holdings required for the formation of CFDs. The CFD shall account for current and future level of maintenance and safety service costs for public works, police and fire departments and facility maintenance of streets and parks and associated infrastructure and amenities of the CFD area. The CFD shall include costs for programming including recurring events. A CFD is an assessment district that provides financing for local public facilities and services, such as street improvements, water infrastructure, wastewater infrastructure, drainage, electricity, schools, parks, and police protection. Two-thirds voter approval is required to establish a CFD. The properties adjacent to the Main Street Promenade are within an existing Property Tax Community Based CFD. If the CFD fails in any specified area, other cost recovery mechanisms shall be considered prior to continued development occurring including a Mello-Roos District and/or development impact fees. The goal is to provide cost recovery for maintenance and service costs through ongoing fees and/or taxes for development since current service levels for maintenance and police personnel are not sufficient and since new facilities are required to support new development.

c. Within two years of this Downtown Specific Plan's adoption, a parkland fee study shall be conducted based on needs for the entire future population of the City at a rate of 1.5 acres per 1,000 residents based on a year 2050 build out. Thereafter, parkland in-lieu fees may be paid per dwelling unit based on number of bedrooms and in-lieu fees established by City Council. Parkland fees generated from this Downtown Specific Plan shall be prioritized as follows (in order of priority):

    i. Main Street Promenade (park improvements),
    ii. Village Promenade,
    iii. Civic Center Park (park improvements),
    iv. Pacific Avenue Park,
    v. Kunkel Park Expansion, and then
    vi. Connect Main Street

d. Future reasonable fee pass-through mechanisms, like Mello Roos fees, may be considered to encourage immediate development with street, sign and park improvements paid for by future residents and employment centers.

e. A credit towards parkland fees and street improvements for public park improvements and amenities shall be provided for improvements above and beyond the minimum requirements and standards called for in this Specific Plan. This allows a developer to provide park improvements that will have the most positive impacts towards their project.

3. Prioritize entitlement approvals within the Specific Plan area to expedite development. Approve entitlements administratively to the extent feasible.

PROMOTION AND MARKETING

To differentiate downtown Lemon Grove as a unique destination within the region, promotional and marketing support is needed from the formation and continuance of an organization, such as a

Property Based Improvement District (PBID), Business Improvement District (BID) and/or Chamber of Commerce, dedicated to rebranding and marketing the Specific Plan area. This organization should work with other key groups, such as the East County Chamber of Commerce, local nonprofit groups and Lemon Grove merchants within the Specific Plan area, to coordinate revitalization efforts. A new logo for downtown should be considered as part of this process.

DOWNTOWN COORDINATOR

A Downtown Coordinator, possibly paid through BID funds, could be responsible for facilitating downtown development and promotion. This includes working with merchants and other business people to set goals and decide what events, activities, programming and improvements should be pursued downtown. These actions could include organizing promotions and special events to working on attracting new businesses to the area. Once this overall direction has been set, the coordinator would be responsible, with assistance from the merchants and/or volunteers, for overall implementation.

PROPERTY OWNER INCENTIVES FOR ONGOING FAÇADE IMPROVEMENTS

Improving and upgrading building façades is important to creating the desired atmosphere for downtown Lemon Grove. Providing volunteers, grants or loans to assist property owners to improve the appearance of their buildings can enhance the economic climate for all businesses in the area. Such a façade improvement program might include:

- ***VOLUNTEER ASSISTANCE.*** As a part of city beautification events, paint and clean up businesses in need of repair. Encourage the business and property owners to pay for the cost of materials.
- ***CASH REBATES.*** To encourage revitalization, as funds allow, the City may consider offering cash rebates for a portion of the cost of eligible facade improvements.
- ***LOW INTEREST LOANS***. In addition to cash rebates, or in lieu thereof, a low interest loan program could be made available to assist property owners with long term financing of eligible façade improvements.
- ***GRANTS.*** In extraordinary circumstances where significant aesthetic improvement would be gained, the City could offer an outright grant for special façade improvements.

Eligible improvements might include: storefront renovation, including landscape improvements, exterior paint, new conforming signs, awnings, canopies, exterior wall lighting, windows and street facing storefronts.

All façade improvements, to be eligible for financial assistance, must comply with the requirements and standards contained in this Specific Plan. An applicant could obtain private funding or a low interest loan from the City. The City could reimburse the applicant with a grant/rebate upon satisfactory completion of work based on actual invoices and letter of commitment. A façade easement might be recorded in favor of the City to ensure continued maintenance of the façade, should the owner fail to do so.

Possible sources of funding for the program may include Community Development Block Grant (CDBG) funding and/or PBID or BID funding.

TREE PLANTING

The City could establish a special tree planting fund supported by community stakeholders and possibly planted by volunteers to help defray some of the costs of installing and maintaining street trees throughout the Specific Plan area. The fund would receive money through community donations.

When existing designated trees over a certain size are removed from private property and cannot be replaced, the project proponent may consider adding or replacing the trees in the public right-of-way or at a nearby private property with the property owner's permission. In lieu of doing any of the above, the project proponent can pay an in-lieu fee based on the number of trees removed and their size. These fees would be used to fund the purchase, installation or on-going maintenance of trees in the Downtown Specific Plan area.

AMORTIZATION ORDINANCE

Within a year of adoption of this Downtown Specific Plan, adopt an amortization ordinance to provide a five to ten year period for nonconforming businesses to vacate the Downtown Specific Plan area. To support this, the City could provide expedited permit processing and licensing for businesses who relocate to a zoning district which allows for their nonconforming use.

STATE MILLS ACT CONTRACTS

As a preservation incentive, historic property agreements offer advantages to both the City and the property owner. These agreements, commonly referred to as "Mills Act" contracts, provide for property tax relief for owners of qualified historic properties who agree to comply with certain preservation criteria.

The use of Mills Act contracts (Government Code Sections 50280 through 50289) gives the City the flexibility to deal with historic structures on a case by case basis. The City would have the option to choose which properties are suitable for the incentive by evaluating a range of factors, such as the significance of the building to the community, development pressure on the site, or the need for rehabilitation. The contracts can be used both as a tool to preserve an individual building and as part of the broader Specific Plan implementation strategy.

For owners of historic properties, Mills Act contracts offer several distinct advantages. Participation on the part of the owner is completely voluntary. In addition, a Mills Act contract is one of the few incentives available to residential properties. Another important benefit of this incentive is that, since historic properties continue to be protected by the contract when the property is sold, the reduced property tax valuation is passed on to the new owner.

6.3.2 POTENTIAL FUNDING MECHANISMS

FINANCING TOOLS Pursue Regional, State, Federal, and Private Financing Sources. A key action would be to identify, monitor, and apply for other financing sources that meet the City's goals and objectives for the downtown area. This might include the following federal, state, local and private programs:

PROPERTY BASED IMPROVEMENT DISTRICTS (PBIDs) AND BUSINESS IMPROVEMENT DISTRICT (BIDs).

A PBID or BID is a public/private partnership created to perform marketing, provide a variety of enhanced services, and complete capital improvements in order to improve and program commercial neighborhoods. The BID allows the governing body to levy an additional tax on property owners or

businesses within a designated area and to utilize the revenues for improvements and programs, subject to a majority vote of the property owners within the proposed district.

Establishing a PBID or BID is usually initiated by a Chamber of Commerce, a business organization or a group of business or property owners in a specific area. PBIDs and BIDs can be funded without assessments with volunteers coordinating all efforts with donations. A PBID or BID can perform a variety of functions including, but not limited to:

- ***IMPROVEMENTS AND MAINTENANCE,*** such as the acquisition, construction, installation, or maintenance of any tangible property with an estimated useful life of five years or more, including, but not limited to: parking facilities, benches, trash receptacles, street lighting, decorations, parks, and fountains.

- ***ACTIVITIES,*** including, but not limited to, the following:
    - Promotion of public events which benefit businesses in the area and which take place on or in public places within the area.
    - Activities which benefit businesses located and operating in the area (e.g., hiring a Downtown Coordinator to manage activities of the program).

- ***OPERATIONS*** of the BID/PBID are governed by a private non-profit corporation made up of a majority of property owners. Their responsibilities include, but are not limited to, the following:
    - Collection of all funds.
    - District management and marketing through the creation of a District Management Plan.
    - Service delivery.

- ***BENEFITS*** of the creation and operation of a BID/PBID are described below:
    - Improves and maintains the district area to be attractive to visitors and attract shoppers.
    - Community engagement while providing a range of supplemental services to the district.
    - Increased opportunities for economic development.
        - Depending on the budget, funds can be allocated towards the marketing, promotion, and branding of the district. This can include community events within the district such as a farmer's market.
    - Beautifies an area through streetscape improvements, landscape improvements, storefront improvements, graffiti removal, increased and improved maintenance, wayfinding and gateway signage etc. Some PBIDs/BIDs choose to offer homeless outreach and resources.
    - Decreases and can eliminate crime, theft, illegal dumping and homeless camps.
    - Removes financial burden from the City.

- ***OTHER CONSIDERATIONS.*** The creation and operation of a BID/PBID requires several financial and legal considerations.

- ***FINANCIAL CONSIDERATIONS***

  Funds to pay for PBID/BID programs and services are generated from a special assessment paid by the benefited property or business owners. The assessment is billed and collected by the City and then disbursed to the PBID/BID, which in turn delivers the district's services. Every dollar of the funds contributed to the BID or PBID is dedicated to making the specified district a more desirable and profitable place to be.

  The assessment fee can be calculated in a variety of ways; one common method is to create a calculation based on lot square footage, building square footage, and location or zone within the district. For example, a commercial property in designated zone X with a 2,000-square-foot building on a 4,000-square-foot lot would be assessed as follows: 2,000 x $0.16 + 4,000 x $0.08 = $640 per year.

  Property owners are enticed with hard evidence that BIDs create financial success. The goal is to attract more customers, which generates increased revenue, which improves tenancy rates and property values.

- ***LEGAL GUIDELINES AND CONSIDERATIONS***
  - Proposition 218: The Right to Vote on Taxes Act (follow-up to Proposition 13 downfall)
    - Regulates voting requirements.
    - Renters can vote on an assessment if their lease agreements specify that they are responsible for paying the assessment.
    - Local governments would have to reject the proposed assessment/fee if written protests are presented by the majority of the affected property owners.
  - According to state law, the maximum term a PBID can be in place is 5 years. If proven successful, then a 10-year term can be an option presented to voters.
  - According to state law, in the petition phase and ballot process, votes must be weighed based on percentage of ownership.
    - A property owner who owns 1% of the total property in the downtown area will pay 1% of the total assessment and will have 1% of the total voting weight.
  - A public hearing at least 45 days after the mailing, which often coincides with the last day of voting. Ballots are counted following the public hearing.
  - Reference Streets and Highway Code Section 3600-36604, the Property and Business Improvement District Law of 1994.

- ***CASE STUDY: THE BYZANTINE LATINO QUARTER BID***
  - The Byzantine Latino Quarter BID (BLQ BID) is an assessment district in which property owners are the primary investors in the creation of a safe, welcoming and thriving business environment along Pico Boulevard from the 110 freeway to Western Avenue and small portions of Normandie Avenue and Venice Boulevard in Los Angeles, California. On an annual basis, property owners contribute funds towards street maintenance, beautification projects and marketing efforts to benefit the properties and businesses in this area of Los Angeles.

    The BLQ BID is guided by its mission of keeping the business corridor clean and free of trash while creating a safe and attractive environment in which people can work, shop and

conduct business. This BID operates with an annual budget of $137,000 and is run by a non-profit. The majority of their operating budget is allocated to district maintenance, which mostly consists of pressure washing sidewalks and buildings. The BID supports art in the district and commissions artists to create murals and graffiti art which is popular in this neighborhood. In this BID, churches coordinate homeless outreach and services and the BID pays the bill.

The BLQ BID is located within a disadvantaged community with challenges and conditions akin to Lemon Grove. When the BLQ BID was up for approval in 2013, the property owners voiced their support with a resounding 76% approval vote.

ENHANCED INFRASTRUCTURE FINANCING DISTRICT (EIFD). An EIFD is created and used to finance the construction or rehabilitation of public infrastructure and private facilities of communitywide significance, including, but not limited to: brownfield restoration and other environmental mitigation, military base remediation, affordable housing for rent or purchase, transit priority projects, and projects to implement a sustainable communities strategy. These facilities may be funded with the property tax increment of taking agencies (such as cities, counties, special districts, but not schools) that consent. An EIFD is overseen by a Public Financing Authority (PFA) that is comprised of members of the legislative body(s) of the participating affected taxing entity plus two members of the public. The PFA has the authority to adopt an infrastructure financing plan, issue bonds for which only the district is liable, fund infrastructure projects through tax increment financing pursuant to the infrastructure financing plan, and loan monies to infrastructure financing districts to fund the activities described in the infrastructure financing plan.

COMMUNITY FACILITY DISTRICTS (CFDs). A CFD is an assessment district (commonly known as Mello-Roos) with bonding and taxing authority that provides financing for local public facilities and services, such as street improvements, water infrastructure, wastewater infrastructure, drainage, electricity, schools, parks, and police protection. Financing of existing facilities is not permitted. A Community Facilities District (CFD) is initiated by either: (1) a written request signed by two members of the legislative body (local government or school district); (2) a petition signed by 10% of the eligible voters in the area; or (3) a petition signed by the landowners of 10% of the area in the proposed district. Two-thirds voter approval is required to establish a CFD. The properties adjacent to the Main Street Promenade are within a Property Tax Community Based CFD.

LANDSCAPING AND LIGHTING DISTRICTS (LLD). Local governmental agencies may form LLDs for the purpose of financing the costs and expenses of landscaping and lighting public areas. LLDs may be used for installation and maintenance of landscaping, statutes, fountains, general lighting, traffic lights, recreational and playground courts and equipment, and public restrooms, as well as the acquisition of land for parks and open space and the construction of community centers and municipal auditoriums and halls. Funds are acquired through the levying of an annual assessment on benefiting properties subject to the requirements of Proposition 218 and Proposition 26. LLD's also may provide for construction and maintenance of appurtenant features, including curbs, gutters, walls, sidewalks or paving, and irrigation or drainage facilities. They also may be used to fund and maintain parks above normal park standards as maintained through general fund revenues.

COMMUNITY REVITALIZATION AND INVESTMENT AREAS (CRIAS). A CRIA is a public agency separate from the city, county, or city and county that created it. They can authorize the revitalization of

disadvantaged communities through planning and financing infrastructure improvements and upgrades; economic development activities; and affordable housing via tax increment financing based, in part, on the former community redevelopment law. CRIA revitalization areas are subject to statutory requirements for eligibility, including measures of: income, unemployment, crime, and deterioration. A Revitalization Plan outlining the goals and objectives, estimated revenues and expenditures, and the programs to be implemented, must be prepared prior to beginning operations. If the majority of property owners in a Revitalization Area object to the Revitalization Plan, it cannot be adopted.

FUNDING SOURCES. Pursue Regional, State and Federal Funding Sources. A key action would be to identify, monitor, and apply for other governmental funding sources that meet the City's goals and objectives for the downtown area. This might include the following federal, state and local programs, such as:

CALIFORNIA INFRASTRUCTURE AND ECONOMIC DEVELOPMENT BANK (IBANK). IBANK (established in 1994) provides financing for public infrastructure and economic development projects. This entity has broad authority to issue tax-exempt and taxable revenue bonds, provide financing to public agencies, provide credit enhancements, acquire or lease facilities, and leverage State and Federal funds. In addition, IBANK provides programs such as the Small Business Loan Guarantee Program (SBLGP), which provides repayment guarantees to lenders of loans to small businesses having difficulty finding financing on their own, and the California Lending for Energy and Environmental Needs (CLEEN) Center, which provides low-cost financing to State and local governments for approved energy efficient projects.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) FUNDS. The federal government provides limited funding for local community development programs under the CDBG program. Funds have historically been made available for housing, business and street improvement and revitalization and also job training and economic development. The emphasis for targeting of CDBG funds is towards benefiting groups and individuals of low and moderate income. Subject to the availability of funds, CDBG could be utilized to develop minor public improvements (i.e., curbs, gutters, sidewalks) to rehabilitate housing, and to make cosmetic improvements to business facades in low-income areas. CDBG funds will not provide a significant basis for implementing the Plan's objectives, but can combine with other measures of the overall program.

The U.S. Department of Housing and Urban Development (HUD) determines the amount of each grant by using a formula comprised of several measures of community need, including the extent of poverty, population, housing overcrowding, age of housing, and population growth lag in relationship to other metropolitan areas.

FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT OF 2015. The FAST Act, administered by the Federal Highway Administration (FHWA), authorizes $305 billion in federal over fiscal years 2016 through 2021 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The funds resulting from this apportionment are available for obligation until September 30, 2021. Any amounts not obligated by a state on or before September 30, 2021, shall lapse.

ACTIVE TRANSPORTATION PROGRAM (ATP) ADMINISTERED BY THE CALIFORNIA TRANSPORTATION COMMISSION AND CALTRANS. The ATP is intended to increase the proportion of trips accomplished by biking and walking. Grant funds are to be allocated to eligible projects by the California Transportation Commission with 40% of available funds to be made available for programming by metropolitan planning organizations in urbanized areas with a population greater than 200,000, 10% for small urban and rural regions, and 50% on a statewide basis, with all awards to be made competitively. The Program is intended to fund Infrastructure Projects, Plans, Non-infrastructure Projects, and Infrastructure projects with non-infrastructure components.

TRANSNET SMART GROWTH INCENTIVE PROGRAM AND ACTIVE TRANSPORTATION GRANT PROGRAM

The TransNet Extension Ordinance provides funding for two competitive grant programs that support local efforts to increase walking, biking, and transit use throughout the region: the Smart Growth Incentive Program (SGIP) and Active Transportation Grant Program (ATGP). The ATGP also is funded with Transportation Development Act (TDA) funds.

The SGIP provides funding for transportation-related infrastructure improvements and planning efforts that support smart growth development in Smart Growth Opportunity Areas as shown on the Smart Growth Concept Map. The goal is to fund comprehensive public infrastructure projects and planning activities that facilitate compact, mixed-use, transit-oriented development and increase housing and transportation choices. SANDAG makes available the grant applications of projects funded through the SGIP.

The goal of the ATGP is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices and increase connectivity to transit, schools, retail centers, parks, work, and other community gathering places. The grant program also encourages local jurisdictions to provide bike parking, education, encouragement, and awareness programs that support pedestrian and bike infrastructure. SANDAG makes available the grant applications of projects funded through the ATGP.

WATER QUALITY, SUPPLY, AND INFRASTRUCTURE IMPROVEMENT ACT OF 2014. The Water Quality, Supply, and Infrastructure Improvement Act of 2014, provides funding to address water quality, supply, and infrastructure improvement issues in California. The bond is comprised of seven categories of funding. Bond money would be available to state agencies for various projects and programs, as well as for loans and grants to local governments, private water companies, mutual water companies (where water users own the company), Indian tribes, and nonprofit organizations.

CALIFORNIA URBAN RIVERS GRANT PROGRAM ADMINISTERED BY THE CALIFORNIA NATURAL RESOURCES AGENCY. The Water Quality, Supply, and Infrastructure Improvement Act of 2014 authorized the Legislature to appropriate twenty million dollars to the California Natural Resources Agency for the California Urban Rivers Grant Program. The program is intended to fund "green infrastructure that conserves water, buffers climate change impacts, improves water quality, water supply, public health, reduces greenhouse gas emissions, and energy demand, restores, and protects rivers, creeks and streams including the acquisition of resource lands." Grant funds are awarded to projects that implement the three objectives of the

California Action Plan which are: 1) more reliable water supplies, 2) the restoration of important species and habitat, and 3) a more resilient and sustainably managed water infrastructure. Projects must be multi-benefit watershed and urban rivers enhancement projects in urban watersheds that increase regional and local water self-sufficiency. There are no minimum or maximum grant amounts for this Program.

ENVIRONMENTAL ENHANCEMENT AND MITIGATION (EEM) GRANT PROGRAM BY THE CALIFORNIA NATURAL RESOURCES AGENCY. The EEM Program encourages projects that produce multiple benefits which reduce greenhouse gas emissions, increase water use efficiency, reduce risks from climate change impacts, and demonstrate collaboration with local, state and community entities. Grants are offered to local, state, and federal governmental agencies, as well as nonprofit organizations, for projects to mitigate environmental impacts caused by new or modified state transportation facilities. Eligible projects must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of a new transportation facility and must fit one of the following categories: 1) Urban Forestry projects designed to offset vehicular emissions of carbon dioxide; 2) Resource Lands projects for the acquisition or enhancement of resource lands to mitigate the loss of, or the detriment to, resource lands lying within or near the right-of-way acquired for transportation improvements; or 3) Mitigation Projects Beyond the Scope of the Lead Agency responsible for assessing the environmental impact of the proposed transportation improvement. Grants for individual projects are generally limited to $500,000 each, however the Agency may recommend awards up to $1,000,000 for acquisition projects.

AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES PROGRAM (CALIFORNIA STRATEGIC GROWTH COUNCIL). The Strategic Growth Council's Affordable Housing and Sustainable Communities (AHSC) Program provides grants and affordable housing loans for compact transit-oriented development and related infrastructure. AFHSC also benefits programs that reduce greenhouse gas ("GHG") emissions and benefit Disadvantaged Communities and Low-Income Communities by increasing the accessibility of housing, employment centers, and key destinations via low-carbon transportation options (walking, biking, transit) thereby resulting in fewer vehicle miles traveled (VMT) and mode shift. Three project prototypes have been identified to implement this strategy: 1) Transit Oriented Development (TOD) Project Areas; 2) Integrated Connectivity Project (ICP) Project Areas; or 3) Rural Innovation Project Areas (RIPA).

SANDAG SENIOR MINI-GRANT PROGRAM. The Senior Mini-Grant (SMG) program provides financial support to local agencies and nonprofit organizations to offer specialized transportation services for seniors age 60 and older. These grants are intended to fund innovative and flexible programs that support the transportation needs of older adults. Passengers who are not seniors may be transported through the program, but no more than 20 percent of the trips provided may be to riders younger than 60. The program is funded by TransNet, the regional half-cent sales tax for transportation projects. SANDAG allocates funds for the program through a competitive, countywide grant process. A committee composed of non-applicant agency representatives and expert community members reviews, scores, and ranks the applications and a list of projects recommended for funding is presented to the SANDAG Transportation Committee and Board of Directors for final approval.

NEW MARKET TAX CREDIT PROGRAM. The New Market Tax Credit Program (NMTC) is jointly administered by the Community Development Financial Institutions (CDFI) Fund and the Internal Revenue Service (IRS). It acts to incentivize community development and economic growth through the use of tax credits that attract private investment to distressed communities. The goal of the program is to spur revitalization efforts of low-income and impoverished communities across the United States. An individual or corporate investor is able to receive a tax credit against their federal income tax in exchange for making equity investments in specialized financial intermediaries called Community Development Entities (CDEs). The CDEs are able to use the capital from these equity investments to make loans and investments to businesses operating in low-income communities on better rates and terms and more flexible features than the market. CDEs must be certified by the CDFI to participate in the program and have a primary mission of serving low-income communities to be eligible.

SELF-GENERATION INCENTIVE PROGRAM. The California Public Utilities Commission (CPUC) unveiled a new equity program, Self-Generation Incentive Program (SGIP), that directs 25 percent of funds for distributed energy storage to low income households and environmentally burdened communities throughout the state. Eligible customers also include state and local government agencies, educational institutions, non-profits, and small businesses.

SGIP provides incentives to support existing, new, and emerging distributed energy resources. SGIP provides rebates for qualifying distributed energy systems installed on the customer's side of the utility meter. Qualifying technologies include wind turbines, waste heat to power technologies, pressure reduction turbines, internal combustion engines, microturbines, gas turbines, fuel cells, and advanced energy storage systems.

METERED PARKING. As demand for parking in the Specific Plan area increases, the City could explore the implementation of metered parking as a regulatory tool. Funds from meter revenues could be used for parking related facilities and improvements, programs, and enforcement.

6.3.3 PUBLIC IMPROVEMENT PROGRAMS

This category of programs includes physical improvements within the public right-of-way (e.g., streets, landscaping, lights, water/sewer). The infrastructure and traffic evaluation prepared as part of this Specific Plan reviewed the impact of future development upon downtown Lemon Grove's water, wastewater/sewer, drainage and circulation systems. These are discussed below.

WATER

While any future upgrades would have to be coordinated and managed through Helix Water District (HWD), the existing storage capacity, distribution system, and transmission lines within the City present no immediate obstacles to smart growth development within the Specific Plan area, except as it relates to water pressure supplied by Helix Water District. Future development will often require individual pump systems in order to provide appropriate water pressure unless Helix Water District provides a similar pump system to serve the downtown area to increase water pressure. Pump systems represent a considerable cost for new developments. Overall, the system is well-gridded, but will need to be upgraded in order to be adequately pressurized. Below is a list of recommended actions the City should consider:

1. Monitor the existing system and ensure the City is achieving the requirements identified in the HWD Urban Water Management Plan 2015 (water use target of 114 Gallons Daily Per Capita Water Use in 2020).
2. Incentivize green building practices within the Specific Plan area that reduce demands on potable water, such as:
    a. Employ catchment/reuse systems to collect rainwater for reuse as a supplemental landscape water supply.
    b. Encourage greywater plumbing systems in new buildings where practical, in coordination with local health standards.
    c. Continue to enforce water efficient landscape regulations; BMP's, Biofilters, tree wells, etc.
    d. Continue to install/update existing low-water-use fixtures and appliances in all new and renovated buildings to ensure the City is using the most efficient systems.
    e. Continue to enforce the sustainability design requirements as a part of new development.
3. Encourage Helix Water District (HWD) to upgrade their water service infrastructure to eliminate requirements for new developments to have individual pump systems, which is a considerable cost for new developments. Alternatives could be HWD reducing meter fees or rates for a certain time period to reimburse developers for costs to install pump systems to ensure appropriate water pressure is provided. These pump systems are a considerable cost burden on developers. A minimum 100 psi is recommended.

SEWER

Wastewater service and infrastructure is provided and maintained by the Lemon Grove Sanitation District. As identified in the Lemon Grove Sewer Master Plan, 2017 prepared by Dexter Wilson, three drainage basins have capacity constraints and will require monitoring in order to assure adequate service is provided for future population growth. Below is a list of recommended actions the City should consider:

1. Implement the identified CIP projects within the Lemon Grove Sewer Master Plan for the pipelines along Broadway (CIP18), Broadway South (CIP8), and Downtown Village Specific Plan (CIP21).
2. Update the sewer connection and recurring equivalent dwelling unit (EDU's) annual fee to fund the maintenance and improvements needed for the City's 2050 build out.
3. Maintain reduced fees for breweries and similar uses.
4. Monitor existing infrastructure to ensure adequate flow capacities to handle increased population.
5. As development occurs within the Specific Plan area, the sewer modeling will need to determine whether additional on-off site improvements are warranted or if the identified CIP improvement will be required to be constructed sooner.
6. Focus infill development and/or increase housing density in areas that have an existing adequate capacity to handle an increase in population.

STORM DRAINAGE

There are no constraints to development due to existing conditions within the downtown stormwater systems, as revitalization or reuse would occur over land that has been previously developed or disturbed. However, according to the 2017 Downtown Village Specific Plan Expansion Baseline

Opportunities and Constraints Analysis, six locations within the Specific Plan area are experiencing drainage deficiencies and should be monitored and/or improved if these deficiencies continue or are exacerbated. The six locations include:

- Lemon Grove Avenue at Broadway to Hilltop Drive: 30 inch (in) CMP at 1,190 feet (ft.).
- Lemon Grove Avenue at Massachusetts Avenue to Beryl St: 72 in RCP at 1,940 ft.
- Broadway and Massachusetts Avenue: 30 in RCP at 100 ft.
- Broadway and Massachusetts Avenue to north of Broadway at Citrus Street: 30 in CMP at 750 ft.
- North of Broadway at Citrus Street to Harris Street: 48/30 in CMP at 430 ft.
- North of Broadway at Harris Street to West Street: 48 in CMP at 300 ft.

Below is a list of recommended actions the City should consider:

1. Update the City's 1997 Master Plan of Drainage.
    a. Identify if additional storm drain lines have become deficient since the 1997 Master Plan of Drainage.
    b. Provide strategy and priority in order to address existing and future deficient lines.
    c. Incorporate the 2050 build out of the City after the General Plan Update is adopted.
2. Implement capital improvements in areas identified as having deficient drainage capacity.
3. Implement Best Management Practices (BMPs) identified in the City's 2015 Jurisdictional Runoff Management Program and the City's 2016 BMP Design Manual; BMP is a term used to describe a type of water pollution control or treatment.
4. Encourage the incorporation of sustainable building practices into new developments, such as:
    a. Rooftop catchment systems to collect rainwater for reuse as a supplemental landscape water supply.
    b. Design Green Roofs to be considered on new construction.
    c. Use permeable paving materials for streets, sidewalks, parking lots, and driveways.
    d. Implement vegetative swales to detain and infiltrate runoff within existing rights-of-way.
    e. Divert stormwater from roofs, parking lots, and other hardscapes to vegetated swales or bioretention or biofiltration areas instead of storm drains.
    f. Evaluate opportunities to incorporate green street concepts into proposed public works projects.

DRY UTILITIES

Utility systems, including electricity, natural gas, and telecommunications, within the City are generally sufficient to support an increase in population and development. Electricity and Natural Gas are provided to the Specific Plan area by the San Diego Gas & Electric Company (SDG&E). Electricity is transmitted by above ground and underground power lines from the Chollas West Substation. Natural gas lines exist along all major street rights-of-way within the Specific Plan area. A number of companies provide wireless or cell phone service for the area as well, and high speed internet access within the City is offered by AT&T, Cox, and EarthLink. Below is a list of recommended actions the City should consider:

1. Underground overhead utility poles.
2. Encourage new development to incorporate sustainable building practices related to energy conservation.

3. Maximize the number and size of north-facing and south-facing windows; use smaller and fewer windows on east and west sides of buildings.
4. Minimize direct sunlight to the inside of structures using overhangs.
5. Provide fully operable windows that can be adjusted throughout the day for maximum ventilation.
6. Design building interiors to take advantage of natural ventilation by orienting rooms so that breezes can blow through them.
7. Properly insulate and seal all new and renovated buildings to contain and extend the climatic influence of heated or cooled air.
8. Use energy efficient heating, ventilation, and cooling systems that regulate the interior temperature of buildings throughout the day.
9. New parking covers should include solar panels.

MOBILITY

The Design Standards for Streets within the Downtown Specific Plan area are presented in Chapter 5.0. Implementation of these standards should be the responsibility of the City with additional funds and/or improvements coming from developers of properties as a condition of project approval. The City may fund the initial installation of some streetscape elements; however, as new development occurs, the City should require reimbursement for certain installed improvements which directly benefit the adjacent property (e.g. sidewalks, curb/gutter, lighting, street trees) and which also contributes to the principles of Complete Streets.

An alternative to the above approach could be the formation of a special assessment district (e.g. BID, PBID or CFD) to help pay for the desired improvements. This approach would require stakeholders within the assessment district to pay their fair share of the improvements. The City could assume a portion of the costs to lessen the burden on property owners, especially the initial cost of establishing the assessment district.

6.3.4 ADDITIONAL KEY ACTIONS TO IMPLEMENT THE SPECIFIC PLAN

In addition to the recommended actions previously listed in this Chapter, the following actions are key to the implementation of this Specific Plan:

1. To ensure high quality signage throughout the City, a comprehensive sign program will be adopted within six months of the Downtown Specific Plan's adoption by City Council.
2. Consider adopting an Open Space In-lieu Fee to increase open space assets with improvements in the downtown. This would be in lieu of private open space requirements.
3. In order to promote continuity of the major street corridors within the Specific Plan area, the City shall consider the preparation of a comprehensive tree program.
4. Adopt an amortization ordinance providing for the vacation of nonconforming businesses in Downtown Specific Plan area within a year of the Downtown Village Specific Plan’s adoption by City Council.

APPENDIX A – COMMUNITY BENEFITS

COMMUNITY BENEFITS		
Density Bonuses shall be provided as follows:	1 Public Parking Space within or adjacent to the Specific Plan area (excludes provisions within the Parking Overlay)	1 Additional Dwelling Unit
	Public Park Space, Amenities and Improvements within the Specific Plan area	1 Additional Dwelling Unit per $10,000 in valuation of improvements
	Public Art features and amenities within the Specific Plan area (excludes requirements within the Arts and Entertainment Overlay)	1 Additional Dwelling Unit per $10,000 in valuation of improvements
	Public Street Improvements, Wayfinding Signs, and Amenities within the Specific Plan area (excludes requirements for frontage improvements and/or in-lieu fees)	1 Additional Dwelling Unit per $10,000 in valuation of improvements

APPENDIX B – OFF-STREET PARKING REQUIREMENTS

The off-street parking provisions listed below shall determine the minimum number of parking spaces to be provided for each use. Parking standard reductions are listed within the development standards tables for each of the seven Zoning Districts.

OFF-STREET PARKING	
LAND USE ACTIVITY	REQUIRED PARKING
Retail, Office, Restaurants	1 space per 500 SF
Visitor Accommodations	1 space per four units
Assembly Spaces (e.g., Theatres, Auditoriums, Conference Rooms, Classrooms, Places of Workshop)	1.0 space per 24 seats or per 250 SF of floor area where seats are not fixed
Warehousing, Manufacturing,& Industrial	1.0 space per 1,000 SF
Studios Dwelling Unit	.5 space per DU
One Bedroom Dwelling Unit	.75 spaces per DU
Two Bedroom Dwelling Unit	1 spaces per DU
Three Bedroom + Dwelling Unit	1.25 spaces per DU
Guest Parking	1 space per 5 dwelling units
Bicycle Parking	In projects with 4 or more required parking spaces, a rack or other secure device for storing and protecting bicycles from theft shall be installed. Such devices shall be provided for at least one bicycle per ten required parking spaces. Such devices shall be located so as not to interfere with pedestrian or vehicular traffic.
Mixed Use Parking Reduction	Weekday operating uses like Corporate and Professional Offices allow for a 40 percent reduction for that use.
Unassigned Parking Reduction	Parking spaces that are unassigned allow for a 20 percent parking reduction (if also available to the public free of cost during all times a 40 percent parking reduction is allowed instead).
Off-site Parking Reduction	Designated off-site parking spaces within 500 feet of the property allow for a 1:1 ratio parking reduction.
In-Lieu Parking Fees	Per Resolution Established by City Council.

APPENDIX C – SUSTAINABILITY STANDARDS

SUSTAINABILITY STANDARDS		
Minimum Sustainable Development Standards (10 points required[1])	Graywater System/Recycled Water	5 points
	Renewable Energy System	5 points
	Natural Ventilation and Lighting; Passive Heating and Cooling	5 points
	Active Building Design[2]	3 points
	Connectivity[3]	5 points
	Harvesting/Storm Water Storage and Reuse, Stormwater Treatment, and Low Impact Development	3 points
	Green Roofs	3 points
	Tree Preservation	1 point per tree
	Excess Trees	1 point per 40% of excess tree requirements
	Excess Landscape Area	1 point per 20% of excess landscape area
	Excess Usable Open Space	1 point per 20% of excess usable open space area
	Electric Vehicle Charging Station/Parking	1 point per space
	Car/Ride Share Parking	1 point per space
	Bike, Skateboard and/or Scooter Storage and/or Repair Facility	1 points each (2 points max.)
	LEED Certification	10 points
	Recycled & Regional Materials	3 points
	Sustainable Timber	2 points
	Construction Waste Reduction	1 point for 100% waste diversion
	Operational Waste Reduction	2 points
	Designated Loading Area for Vehicles	1 point per space

1 Points awarded are a maximum and may be less where partial compliance is achieved.
2 Prioritizes stairs before elevators. Wide stairways that are easily accessible are encouraged.
3 Encourages publically accessible pedestrian connectivity on through lots.

ARCHITECTURAL STYLES






A.1 INTRODUCTION

As described in detail in Chapter 2, Existing Conditions, the character of the built environment in Downtown Lemon Grove is unsettled. Lemon Grove has a mix of eclectic and varied architectural styles. Buildings in the Study area include the Mission Revivals and Mercantile buildings that Lemon Grove residents, also known as Grovers, often associate with the City's identity. The Downtown Specific Plan (DSP)seeks to enhance emerging and underemphasized aspects of the City's architectural character across planning districts. To achieve this, the DSP requires that buildings within several Zoning Districts incorporate design elements from particular architectural styles. The permitted architectural style(s) for a given Zoning District are in the Design Standards for each District. Architectural style requirements complement the design standards tables in Chapter 4 but do not supersede those regulations.

The following appendix catalogs the architectural styles identified in the Design Standards tables and defines characteristic features.

A.2 American Mercantile

American Mercantile can be considered the quintessential style of the classic American Main Street in the mid-19th and early 20th centuries. A typical mercantile structure is functional, with a ground floor clearly designed for public facing business and upper stories that provide complementary office, residential or multipurpose spaces. Though the building face often reflects these separate interior uses, the overall composition is unified through consistent architectural detailing.

- Mass
  - Rectangular or Boxy
  - Two-Part Block
  - Voluminous
- Exterior Finishes
  - Brick, Masonry
  - Wood or Metal Ground Floor Facade
- Roof
  - Flat often with Parapet
  - Cornice
    - Occasionally bracketed
- Appurtenances
  - Awning
  - Canopy
- Fenestration
  - Expansive Window Planes
  - Recessed Entry
  - Prominent Lintels
  - Window and Door Transoms
  - Windows on Bulkheads
  - Sills and Sashes
- Details
  - Horizontal Delineation of Uses
    - Secondary Cornice
  - Prominent Façade Columns
  - Secondary Access for Upstairs
  - String Courses
  - Patterned Brick and Masonry

A.3 Art Deco/Moderne

Born in Paris in the 1920s, Art Deco blended lavish detailing and modern material to create a distinctive fashion that informed architectural design and popular arts through the Great Depression. Examples of the Art Deco's clean, definitive lines and repetitive geometries can be found in every corner of the globe, including the Empire State and Chrysler Buildings. Over the course of the Great Depression Art Deco design progressed into the Streamline Moderne/Art Moderne style which emphasized the sleek, machine inspired lines. Several Art Deco and Streamline Moderne structures can be found in Lemon Grove and Surrounding communities.

- Mass
  - Rectangular or Boxy
  - Angular, Stepped and Setback Forms
  - Vertically Oriented
  - Symmetry & Repetitious Geometry
  - Streamlined
- Exterior Finishes
  - Smooth Wall Surfaces
    - Concrete, Metal, Plaster, Stone, Stucco
  - Saturated Colors
- Roof
  - Flat often with parapet
- Appurtenances
  - Vertical Elements & Projections
    - Pilasters
    - Columns
    - Spires
    - Towers
- Fenestration
  - Metal Casements
  - Recessed
  - Decorative Transoms
  - Linear Orientation and Grouping of Windows
- Details
  - Low Relief Decorations
  - Radiating Patterns
  - Ornate Detailing
  - Decorative Arts & Sculpture Figures

A.4 Contemporary

Contemporary architecture is always evolving as it is literally the architecture of the present. While previous architectural styles had common genre defining characteristics as products of wider social or intellectual movements, contemporary buildings may vary widely in appearance and purpose. Instead the unifying theme of contemporary structures is innovation. As a result, contemporary buildings often use high tech materials and novel methods to create thoughtful and engaging structures.

- Mass
  - Expressive
  - Sculptural
  - Articulated, Not Strictly Cubic
- Exterior Finishes
  - State of the Art Materials
  - Sustainable Materials
  - Living Materials
- Fenestration
  - Extensive Glazing
- Details
  - Innovative
  - Context Sensitive
  - Natural Lighting
  - Passive Heating and Cooling
  - Novel Appearance

A.5 Craftsman/Federation

The American Craftsman architectural style was a component of the Arts & Crafts movement that began in Europe at the end of the 19th century. American Craftsman and the other Arts & Craft styles arose in opposition to the rapidly industrializing world and the vulgar, ornate designs that flourished in it and the preceding Victorian era. Instead the American Craftsman movement championed simple forms, natural materials, and quality workmanship. The quintessential California Bungalow is a perfect example the American Craftsman style and philosophy.

- Mass
  - Rectangular or Square
  - Horizontal Planes
  - Low-pitched Roof
  - Raised Foundation
- Exterior Finishes
  - Clapboard siding
  - Shake siding
  - Stucco
  - Shingle
  - Earth Tones
- Roof
  - Gables
  - Low Pitched
  - Deep Eaves
  - Exposed Rafter Tails and Knee Braces
- Appurtenances
  - One Story Porch
  - Wing Walls
  - Courtyards
- Fenestration
  - Partially Glazed Doors
  - Horizontally Grouped Windows
  - Often Fixed or Double-Hung Windows
  - Dormer Windows
- Details
  - Wooden Doors
  - Square Pillars and Posts
  - Conspicuous Lintels and Sills
  - Balustrades
  - Gable Vents

A.6 Historic Modern

Historic Modern simply describes a structure that incorporates contemporary architecture into another historical architectural style. This may occur in a new build when a recognized historical architectural style is integrated into a contemporary design either as distinct part or a blended composite. Similarly, a Historic Modern structure can also be the product of a contemporary alteration or addition to an existing historically styled structure. It should be noted that modifications to structures identified in this appendix as historical are subject to the requirements outlined in the Zoning District Design Standards tables.

A.7 Mission Revival/Spanish Colonial

Mission Revival began in the late 19th century when California architects began taking design cues from the Spanish missions found across the state. As they were with the original Missions, the architectural elements of Mission Revival buildings are environmentally suited for Southern California. The covered walkways, tile roofs, shaded structural walls and courtyards typical of Mission Revival all aid in temperature regulation during hot and arid summer months. The Mission Style enjoyed great popularity and was easily adapted to large civic buildings and churches like Santa Fe Depot in Downtown San Diego but was eventually subsumed by the more ornate Spanish Revival style found in Balboa Park. Either Spanish Colonial or Mission Revival can be used when called for in the design standards table.

- Mass
  - Rectangular or Square
  - Expansive Planes
- Exterior Finishes
  - Smooth stucco or plaster siding
  - Light Colors
- Roof
  - Clay Tile Roofing
  - Flat or Low-Pitched Roofs
  - Projecting eaves with exposed rafters or brackets
- Appurtenances
  - Entry Porch
  - Arcades and Balconies
  - Courtyards
  - Bell Towers
- Fenestration
  - Recessed Windows and Doors
  - Quatrefoil Windows
  - Wood Frames and Casing
  - Casement or Double-Hung Sash
  - Wide or Paired Doors
- Details
  - Undulating Parapet
  - Sparse Ornamentation *(Mission Revival)*
  - Arched Openings
  - Square Columns
  - Corner Coping
  - Rich Ornamentation *(Spanish Colonial)*

A.8 Queen Anne/Victorian

Queen Anne architecture, often generally described as Victorian, was one of many eclectic architectural styles that enjoyed wide spread popularity during the late 19th century. The heyday for these styles coincided with the reign of the British Monarch, Queen Victoria, hence the name. In the United States, the Queen Anne style incorporated elements from a variety renaissance era architectural styles and actually bears little resemblance to the structures built during the reign of Queen Anne. Though the characteristics that follow describe the American Queen Anne style specifically, Victorian architecture in the Downtown Village Specific Plan may include: Stick Style, Shingle Style, or Folk Victorian.

- Mass
  - Asymmetrical
  - Vertical
  - Multifaceted
- Exterior Finishes
  - Bold Colors
  - Masonry
  - Brick
  - Shingles/Clapboard
  - Slate
  - Stucco
- Roof
  - Steep Pitch Roofs
  - Cross Gables
- Appurtenances
  - Expansive Entry Porches
  - Second Story Porches
  - Turrets/Towers
- Fenestration
  - Bay and Oriel Windows
  - Tall and Narrow Frame
  - Multipane
- Details
  - Rich Ornamentation
  - Spindlework
  - Balustrades
  - Spires
  - Patterned Exterior Finishes
  - Occasional use of Stained Glass

A.9 Tudor Revival

After this quintessentially English architecture enjoyed a resurgence in the United Kingdom, Tudor Revival architecture became a popular home building style United States during the years before and after the Great Depression. Aspects of this eclectic architectural style originated druing the reign of the House of Tudor in England and the style is often associated nostalgically with English villages like Stratford-upon-Avon, the birthplace of Shakespeare. All the same, Tudor Revival homes are found in almost any American community. Lemon Grove itself is home to several Tudor Revival structures including the home of the Lemon Grove Historical Society, the H. Lee House, which was built in 1928.

- Mass
  - Asymmetrical
    - Often L-Shaped
  - Typically One or Two Story
  - Emphasized Roofline
- Exterior Finishes
  - Natural Materials
  - Half-timbering
  - Brick
  - Stucco
- Roof
  - Shingles
  - Steep Pitch Roofs
  - Cross Gables
  - Overhanging Gables
  - Prominent Chimneys
  - Small Dormers
- Appurtenances
  - Entry Porch
- Fenestration
  - Grouped Windows
  - Often Doublehung
  - Tall and Narrow Frame
  - Multipane
- Details
  - Detailed Bargeboards
  - Patterned Masonry
  - Arches
  - Board and Batten Doors

ESTIMATED YIELD MAP AND LAND USE INTENSITY/DENSITY TABLE BY BLOCK

Land Use Zoning Districts	ACRES
Specific Plan Boundary	218.7
Neighborhood Commercial	8.6
Broadway Mixed-Use	12.7
Transit Mixed-Use	35.0
Civic	16.2
Village Commercial	21.6
Innovation	45.1
Medium-High Density Residential	13.6
Area Boundaries	
Area ID	
Number of Stories	

Master-Geographic Reference Areas (MGRA)

STATE ROUTE 94
BROADWAY
PACIFIC AV
NORTH AV
LEMON AV
CENTRAL AV
LESTER AV
LEMON GROVE WY
GOLDEN AV
LINCOLN ST
LEMON GROVE AVE
MAIN ST
OLIVE ST
SCHOOL LN
KEMPF ST
WASHINGTON ST
BUENA VISTA AV
MASSACHUSETTS AV
VISTA AV
CITRUS ST
HARRIS ST
WEST ST

N:\Planning\17670_Lemon Grove DVSP Update\GIS\LG_YieldMap_wMGRA_11x17.mxd

RICK ENGINEERING COMPANY

Scale in Feet
0 400 800
North

Date of Exhibit: 7/7/2017
ESRI World Imagery Basemap

Yield Map with Master-Geographic Reference Areas (MGRA)

Lemon Grove Specific Plan Area - Land Use Intensity/Density

Land Use Area	Zoning District	Stories	Acres	Lot Coverage	Commercial S.F.	Office S.F.	Business S.F.	Residential S.F.	Residential Dwelling Units
A-1	Village Comm'l	5	5.0	174,240	174,240	174,240	-	522,720	200
A-2	Village Comm'l	5	4.9	170,755	170,755	170,755	-	512,265	196
A-3	Village Comm'l	5	2.0	87,120	87,120	87,120	-	261,360	80
A-4	Village Comm'l	3	0.3	10,454	10,454	-	-	20,908	9
A-5	Village Comm'l	3	1.4	60,984	60,984	-	-	121,968	42
A-6	Village Comm'l	3	1.8	62,726	62,726	-	-	125,452	54
A-7	Village Comm'l	5	6.0	209,088	209,088	209,088	-	627,264	240
A-8	Civic	2	16.2	282,269	-	564,538	-	-	-
A-9	Neigh. Comm'l	2	4.2	73,181	146,362	-	-	-	-
A-10	Neigh. Comm'l	2	2.8	48,787	97,574	-	-	-	-
A-11	Neigh. Comm'l	2	1.6	27,878	55,756	-	-	-	-
A-12	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21
A-13	Transit MU	3	4.2	109,771	109,771	-	-	219,542	126
A-14	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21
A-15	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76
A-16	Transit MU	5	3.9	101,930	101,930	101,930	-	305,790	156
A-17	Transit MU	5	3.9	101,930	101,930	101,930	-	305,790	156
A-18	Broadway MU	2	4.1	125,017	125,017	-	-	125,017	123
A-19	Transit MU	3	0.7	18,295	18,295	-	-	36,590	21
A-20	Broadway MU	2	1.4	42,689	42,689	-	-	42,689	42
A-21	Broadway MU	2	1.4	42,689	42,689	-		42,689	42
A-22	Broadway MU	2	1.4	42,689	42,689	-	-	42,689	42
A-23	Broadway MU	2	2.1	64,033	64,033	-	-	64,033	63
A-24	Innovation	2	2.3	40,075	-	-	80,150	-	-
A-25	Broadway MU	2	0.6	18,295	18,295	-		18,295	18
A-26	Broadway MU	2	0.8	24,394	24,394	-		24,394	24
A-27	Broadway MU	2	0.8	24,394	24,394	-		24,394	24
A-28	Innovation	2	3.0	52,272	-	-	104,544	-	-
A-29	Innovation	2	3.9	67,954	-	-	135,908	-	-
A-30	Innovation	2	3.5	60,984	-	-	121,968	-	-
A-31	Innovation	2	15.9	277,042	-	-	554,084	-	-
A-32	Transit MU	5	1.5	39,204	39,204	39,204	-	117,612	60
A-33	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76
A-34	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76
A-35	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76
A-36	Transit MU	5	2.8	73,181	73,181	73,181	-	219,543	220
A-37	Transit MU	7	2.0	52,272	52,272	-	-	261,360	
A-38	Transit MU	5	2.0	52,272	52,272	52,272	-	156,816	80
A-39	Transit MU	5	3.3	86,249	86,249	86,249	-	258,747	132
A-40	Transit MU	5	1.9	49,658	49,658	49,658	-	148,974	76
A-41	Innovation	2	4.6	80,150	-	-	160,300	-	-
A-42	Innovation	5	4.7	81,893	-	-	327,572	-	-
A-43	Innovation	5	4.4	76,666	-	-	306,664	-	-
A-44	Innovation	5	2.7	47,045	-	-	188,180	-	-
A-45	Med-High Res.	3	8.4	146,362	-	-	-	-	75
A-46	Med-High Res.	3	5.1	88,862	-	-	-	-	
		Totals:	152.5	3,530,971	2,379,243	1,908,797	1,979,370	5,275,977	2,647