

APPENDIX E

Noise Measurement Data

Appendix E - Noise

Field Noise Measurement Data Sheets

Field Noise Measurement Data

Record: 274

Project Name	LADWP
Project #	8584
Observer(s)	Connor Burke
Date	2016-12-15
autoemail	cburke@dudek.com

Meteorological Conditions

Temp (F)	60
Humidity % (R.H.)	65
Wind	Calm
Wind Speed (MPH)	2
Wind Direction	East
Sky	Overcast

Instrument and Calibrator Information

Instrument Name List	(ENC) Rion NL-52
Instrument Name	(ENC) Rion NL-52
Instrument Name Lookup Key	(ENC) Rion NL-52
Manufacturer	Rion
Model	NL-52
Serial Number	553896
Calibrator Name	(ENC) LD CAL150
Calibrator Name	(ENC) LD CAL150
Calibrator Name Lookup Key	(ENC) LD CAL150
Calibrator Manufacturer	Larson Davis
Calibrator Model	LD CAL150
Calibrator Serial #	5152
Pre-Test (dBA SPL)	94
Post-Test (dBA SPL)	94
Windscreen	Yes
Weighting?	A-WTD
Slow/Fast?	Slow
ANSI?	Yes

Recordings

Record #	1
Site ID	M1
Site Location	Latitude:34.206975, Longitude:-118.444379, Altitude:232.893478, Speed:0.000000, Horizontal Accuracy:5.000000, Vertical Accuracy:4.000000, Time:10:41:25 AM PST
Begin (Time)	11:05:00
End (Time)	11:15:00
Leq	72.2
Lmax	88.6
Lmin	42.4
Other Lx?	L90, L50, L10
L90	47.6
L50	61.4
L10	73.1
Other (Specify Metric)	

Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Rustling Leaves
Other Noise Sources Additional Description	Trash truck.
Is the same instrument and calibrator being used as previously notated?	Yes
Are the meteorological conditions the same as previously notated?	Yes

Source Info and Traffic Counts	
Distance to Roadway (feet)	10
Estimated Vehicle Speed (MPH)	35
Count Duration (Min)	10

Traffic Counts	
Counting Both Directions?	Yes
Autos	1
Number of Vehicles - Autos	50
Medium Trucks	1
Number of Vehicles - Medium Trucks	4

Description / Photos

Site Photos	
Photo	
Comments / Description	Facing Covello Street

Recordings	
Record #	2
Site ID	M4
Site Location	Latitude:34.208662, Longitude:-118.443318, Altitude:235.254379, Speed:0.280000, Horizontal Accuracy:10.000000, Vertical Accuracy:4.000000, Time:10:56:43 AM PST
Begin (Time)	11:20:00
End (Time)	11:30:00
Leq	53.5
Lmax	76
Lmin	46.6
Other Lx?	L90, L50, L10
L90	46.6
L50	51.2
L10	55.7
Other (Specify Metric)	
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Industrial
Other Noise Sources Additional Description	Fork lift across street at Time Warner building.
Is the same instrument and calibrator being used as previously notated?	Yes
Are the meteorological conditions the same as previously notated?	Yes

Description / Photos

Site Photos

Photo	
	
Comments / Description	Facing south

Recordings	
Record #	3
Site ID	M3
Site Location	Latitude:34.207117, Longitude:-118.447841, Altitude:237.415390, Speed:0.000000, Horizontal Accuracy:5.000000, Vertical Accuracy:4.000000, Time:11:21:13 AM PST
Begin (Time)	11:45:00
End (Time)	11:55:00
Leq	57.6
Lmax	92.3
Lmin	45
Other Lx?	L90, L50, L10
L90	48
L50	55.7
L10	61.3
Other (Specify Metric)	
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Dog Barking, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously notated?	Yes
Are the meteorological conditions the same as previously notated?	Yes

Source Info and Traffic Counts	
Distance to Roadway (feet)	20
Estimated Vehicle Speed (MPH)	35
Count Duration (Min)	10

Traffic Counts	
Counting Both Directions?	Yes
Autos	1
Number of Vehicles - Autos	35
Medium Trucks	1
Number of Vehicles - Medium Trucks	2
Heavy Trucks	1
Number of Vehicles - Heavy Trucks	1

Description / Photos	

Site Photos	

Photo



Comments / Description

Facing north towards LADWP

Recordings

Record #	4
Site ID	M2
Site Location	Latitude:34.207046, Longitude:-118.441058, Altitude:233.370895, Speed:0.000000, Horizontal Accuracy:5.000000, Vertical Accuracy:3.000000, Time:11:41:53 AM PST
Begin (Time)	12:05:00
End (Time)	12:15:00
Leq	55.3
Lmax	93.6
Lmin	44.6
Other Lx?	L90, L50, L10
L90	46.5
L50	50.7
L10	58.4
Other (Specify Metric)	
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously notated?	Yes
Are the meteorological conditions the same as previously notated?	Yes

Source Info and Traffic Counts

Distance to Roadway (feet)	20
Estimated Vehicle Speed (MPH)	35
Count Duration (Min)	10
Posted Speed Limit Sign (MPH)	35

Traffic Counts

Counting Both Directions?	Yes
Autos	1
Number of Vehicles - Autos	40
Medium Trucks	1
Number of Vehicles - Medium Trucks	1

Description / Photos

Site Photos

Photo



Comments / Description

Facing north towards LADWP

Construction Noise Model Input / Output

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
 Case Description: LADWP Mid Valley_Site Preparation

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

		Equipment				
		Impact	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Backhoe	No	40		77.6	560	0
Tractor	No	40	84		560	0
Front End Loader	No	40		79.1	580	0
Backhoe	No	40		77.6	580	0
Dozer	No	40		81.7	600	0
Dozer	No	40		81.7	600	0
Dozer	No	40		81.7	620	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day	Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Backhoe	56.6	52.6	N/A	N/A	N/A	N/A	N/A
Tractor	63	59	N/A	N/A	N/A	N/A	N/A
Front End Loader	57.8	53.8	N/A	N/A	N/A	N/A	N/A
Backhoe	56.3	52.3	N/A	N/A	N/A	N/A	N/A
Dozer	60.1	56.1	N/A	N/A	N/A	N/A	N/A
Dozer	60.1	56.1	N/A	N/A	N/A	N/A	N/A
Dozer	59.8	55.8	N/A	N/A	N/A	N/A	N/A
Total	63	64.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

		Equipment				
		Impact	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Backhoe	No	40		77.6	850	0
Tractor	No	40	84		850	0

Front End Loader	No	40	79.1	850	0
Backhoe	No	40	77.6	850	0
Dozer	No	40	81.7	850	0
Dozer	No	40	81.7	850	0
Dozer	No	40	81.7	850	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			Night
	*Lmax	Leq	Day	Leq	Evening		
			Lmax		Lmax	Leq	
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A
Front End Loader	54.5	50.5	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A
Total	59.4	60.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Excavator	No	40	80.7
Grader	No	40	85	560	0	
Dozer	No	40	81.7	580	0	
Backhoe	No	40	77.6	580	0	
Front End Loader	No	40	79.1	600	0	
Tractor	No	40	84	600	0	

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			Night
	*Lmax	Leq	Day	Leq	Evening		
			Lmax		Lmax	Leq	
Excavator	59.7	55.7	N/A	N/A	N/A	N/A	N/A
Grader	64	60	N/A	N/A	N/A	N/A	N/A

Dozer	60.4	56.4	N/A	N/A	N/A	N/A	N/A
Backhoe	56.3	52.3	N/A	N/A	N/A	N/A	N/A
Front End Loader	57.5	53.5	N/A	N/A	N/A	N/A	N/A
Tractor	62.4	58.4	N/A	N/A	N/A	N/A	N/A
Total	64	64.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

		Equipment				
		Impact	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Description	Device	Usage(%)				
Excavator	No	40		80.7	850	0
Grader	No	40	85		850	0
Dozer	No	40		81.7	850	0
Backhoe	No	40		77.6	850	0
Front End Loader	No	40		79.1	850	0
Tractor	No	40	84		850	0

Results

		Calculated (dBA)		Noise Limits (dBA)				
				Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Excavator	56.1	52.1	N/A	N/A	N/A	N/A	N/A	
Grader	60.4	56.4	N/A	N/A	N/A	N/A	N/A	
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	
Front End Loader	54.5	50.5	N/A	N/A	N/A	N/A	N/A	
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	
Total	60.4	61.3	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Trenching & Underground Utilities

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compactor (ground)	No	20		83.2	560	0
Backhoe	No	40		77.6	560	0
Tractor	No	40	84		580	0
Slurry Trenching Machine	No	50		80.4	580	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day	Evening	Night		
Compactor (ground)	62.2	55.3	N/A	N/A	N/A	N/A	N/A
Backhoe	56.6	52.6	N/A	N/A	N/A	N/A	N/A
Tractor	62.7	58.7	N/A	N/A	N/A	N/A	N/A
Slurry Trenching Machine	59.1	56.1	N/A	N/A	N/A	N/A	N/A
Total	62.7	62.2	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment	Actual	Receptor	Estimated
			Spec Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compactor (ground)	No	20		83.2	850	0
Backhoe	No	40		77.6	850	0
Tractor	No	40	84		850	0
Slurry Trenching Machine	No	50		80.4	850	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day	Evening	Night		
Compactor (ground)	58.6	51.6	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A
Slurry Trenching Machine	55.8	52.7	N/A	N/A	N/A	N/A	N/A
Total	59.4	58.8	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019

Case Description: LADWP Mid Valley_Perimeter Wall Construction

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Drill Rig Truck	No	20		79.1	560	0
Concrete Mixer Truck	No	40		78.8	560	0
Concrete Saw	No	20		89.6	580	0
All Other Equipment > 5 HP	No	50	85		580	0

Results

Calculated (dBA)

Noise Limits (dBA)

Equipment	Calculated (dBA)		Day		Evening		Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Drill Rig Truck	58.2	51.2	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	57.8	53.8	N/A	N/A	N/A	N/A	N/A
Concrete Saw	68.3	61.3	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	63.7	60.7	N/A	N/A	N/A	N/A	N/A
Total	68.3	64.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Drill Rig Truck	No	20		79.1	850	0
Concrete Mixer Truck	No	40		78.8	850	0
Concrete Saw	No	20		89.6	850	0
All Other Equipment > 5 HP	No	50	85		850	0

Results

Calculated (dBA)

Noise Limits (dBA)

Equipment	Calculated (dBA)		Day		Evening		Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Drill Rig Truck	54.5	47.5	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	54.2	50.2	N/A	N/A	N/A	N/A	N/A

Concrete Saw	65	58	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A
Total	65	61.3	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Paving & Site Infrastructure

---- Receptor #1 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Nearest Receiver 560'	Residential	65	60	55			
		Equipment					
Description	Impact	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Paver	No	50		77.2	560	0	
Paver	No	50		77.2	560	0	
Roller	No	20		80	580	0	
Roller	No	20		80	580	0	
All Other Equipment > 5 HP	No	50	85		600	0	
All Other Equipment > 5 HP	No	50	85		600	0	

Results

		Calculated (dBA)		Noise Limits (dBA)			
Equipment	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Paver	56.2	53.2	N/A	N/A	N/A	N/A	N/A
Paver	56.2	53.2	N/A	N/A	N/A	N/A	N/A
Roller	58.7	51.7	N/A	N/A	N/A	N/A	N/A
Roller	58.7	51.7	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	63.4	60.4	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	63.4	60.4	N/A	N/A	N/A	N/A	N/A
Total	63.4	64.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Acoustical Center 850'	Residential	65	60	55			
		Equipment					
Description	Impact	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	850	0
Paver	No	50		77.2	850	0
Roller	No	20		80	850	0
Roller	No	20		80	850	0
All Other Equipment > 5 HP	No	50	85		850	0
All Other Equipment > 5 HP	No	50	85		850	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Paver	52.6	49.6	N/A	N/A	N/A	N/A	N/A
Paver	52.6	49.6	N/A	N/A	N/A	N/A	N/A
Roller	55.4	48.4	N/A	N/A	N/A	N/A	N/A
Roller	55.4	48.4	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A
Total	60.4	61.5	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Office Building and Staff Parking Structure Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Device	Usage(%)	Equipment				
			Impact	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	560	0	
Man Lift	No	20		74.7	560	0	
Man Lift	No	20		74.7	580	0	
Tractor	No	40	84		580	0	
Backhoe	No	40		77.6	600	0	
Man Lift	No	20		74.7	600	0	
Man Lift	No	20		74.7	620	0	
Generator	No	50		80.6	620	0	
Front End Loader	No	40		79.1	640	0	
Welder / Torch	No	40		74	640	0	
Welder / Torch	No	40		74	660	0	
Welder / Torch	No	40		74	660	0	

Equipment	Results						
	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day	Evening	Night		
Crane	59.6	51.6	N/A	N/A	N/A	N/A	N/A
Man Lift	53.7	46.7	N/A	N/A	N/A	N/A	N/A
Man Lift	53.4	46.4	N/A	N/A	N/A	N/A	N/A
Tractor	62.7	58.7	N/A	N/A	N/A	N/A	N/A
Backhoe	56	52	N/A	N/A	N/A	N/A	N/A
Man Lift	53.1	46.1	N/A	N/A	N/A	N/A	N/A
Man Lift	52.8	45.8	N/A	N/A	N/A	N/A	N/A
Generator	58.8	55.8	N/A	N/A	N/A	N/A	N/A
Front End Loader	57	53	N/A	N/A	N/A	N/A	N/A
Welder / Torch	51.9	47.9	N/A	N/A	N/A	N/A	N/A
Welder / Torch	51.6	47.6	N/A	N/A	N/A	N/A	N/A
Welder / Torch	51.6	47.6	N/A	N/A	N/A	N/A	N/A
Total	62.7	62.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Crane	No	16		80.6	850	0
Man Lift	No	20		74.7	850	0
Man Lift	No	20		74.7	850	0
Tractor	No	40	84		850	0
Backhoe	No	40		77.6	850	0
Man Lift	No	20		74.7	850	0
Man Lift	No	20		74.7	850	0
Generator	No	50		80.6	850	0
Front End Loader	No	40		79.1	850	0
Welder / Torch	No	40		74	850	0
Welder / Torch	No	40		74	850	0
Welder / Torch	No	40		74	850	0

Equipment	Results						
	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day	Evening	Night		
Crane	55.9	48	N/A	N/A	N/A	N/A	N/A

Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Generator	56	53	N/A	N/A	N/A	N/A	N/A
Front End Loader	54.5	50.5	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Total	59.4	59.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019

Case Description: LADWP Mid Valley_Water Distribution Shop and Maintenance Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Impact	Device	Usage(%)	Equipment			
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No		16		80.6	560	0
Man Lift	No		20		74.7	560	0
Man Lift	No		20		74.7	580	0
Generator	No		50		80.6	580	0
Backhoe	No		40		77.6	600	0
Welder / Torch	No		40		74	600	0
Welder / Torch	No		40		74	620	0
Welder / Torch	No		40		74	620	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Crane	59.6	51.6	N/A	N/A	N/A	N/A	N/A
Man Lift	53.7	46.7	N/A	N/A	N/A	N/A	N/A
Man Lift	53.4	46.4	N/A	N/A	N/A	N/A	N/A
Generator	59.3	56.3	N/A	N/A	N/A	N/A	N/A
Backhoe	56	52	N/A	N/A	N/A	N/A	N/A
Welder / Torch	52.4	48.4	N/A	N/A	N/A	N/A	N/A

Welder / Torch		52.1	48.2	N/A	N/A	N/A	N/A	N/A
Welder / Torch		52.1	48.2	N/A	N/A	N/A	N/A	N/A
Total		59.6	60.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Acoustical Center 850'	Residential	65	60	55			
		Equipment					
		Impact	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Description	Device						
Crane	No		16		80.6	850	0
Man Lift	No		20		74.7	850	0
Man Lift	No		20		74.7	850	0
Generator	No		50		80.6	850	0
Backhoe	No		40		77.6	850	0
Welder / Torch	No		40		74	850	0
Welder / Torch	No		40		74	850	0
Welder / Torch	No		40		74	850	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day	Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane	55.9		48	N/A	N/A	N/A	N/A
Man Lift	50.1		43.1	N/A	N/A	N/A	N/A
Man Lift	50.1		43.1	N/A	N/A	N/A	N/A
Generator	56		53	N/A	N/A	N/A	N/A
Backhoe	53		49	N/A	N/A	N/A	N/A
Welder / Torch	49.4		45.4	N/A	N/A	N/A	N/A
Welder / Torch	49.4		45.4	N/A	N/A	N/A	N/A
Welder / Torch	49.4		45.4	N/A	N/A	N/A	N/A
Total	56		56.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Department Fleet Vehicles Parking Structure Construction

---- Receptor #1 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Nearest Receiver 560'	Residential	65	60	55			

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Crane	No	16	80.6
Man Lift	No	20	74.7	560	0	
Man Lift	No	20	74.7	580	0	
Generator	No	50	80.6	580	0	
Backhoe	No	40	77.6	600	0	
Welder / Torch	No	40	74	600	0	
Welder / Torch	No	40	74	620	0	
Welder / Torch	No	40	74	620	0	

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Crane	59.6	51.6	N/A	N/A	N/A	N/A	N/A
Man Lift	53.7	46.7	N/A	N/A	N/A	N/A	N/A
Man Lift	53.4	46.4	N/A	N/A	N/A	N/A	N/A
Generator	59.3	56.3	N/A	N/A	N/A	N/A	N/A
Backhoe	56	52	N/A	N/A	N/A	N/A	N/A
Welder / Torch	52.4	48.4	N/A	N/A	N/A	N/A	N/A
Welder / Torch	52.1	48.2	N/A	N/A	N/A	N/A	N/A
Welder / Torch	52.1	48.2	N/A	N/A	N/A	N/A	N/A
Total	59.6	60.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Crane	No	16	80.6
Man Lift	No	20	74.7	850	0	
Man Lift	No	20	74.7	850	0	
Generator	No	50	80.6	850	0	
Backhoe	No	40	77.6	850	0	
Welder / Torch	No	40	74	850	0	
Welder / Torch	No	40	74	850	0	
Welder / Torch	No	40	74	850	0	

Equipment	Calculated (dBA)		Results				
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Crane	55.9	48	N/A	N/A	N/A	N/A	N/A
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A
Generator	56	53	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A
Total	56	56.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Supply Chain

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Crane	No	16	80.6

Equipment	Calculated (dBA)		Results				
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Crane	59.6	51.6	N/A	N/A	N/A	N/A	N/A
Total	59.6	51.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No	16		80.6	850	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day	Evening	Night		
Crane	55.9	48	N/A	N/A	N/A	N/A	N/A
Total	55.9	48	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Fleet Maintenance

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Equipment

Description	Device	Usage(%)	Impact	Spec	Actual	Receptor	Estimated
				Lmax	Lmax	Distance	Shielding
Crane	No	16		(dBA)	(dBA)	(feet)	(dBA)
				80.6	560	0	

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day	Evening	Night		
Crane	59.6	51.6	N/A	N/A	N/A	N/A	N/A
Total	59.6	51.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Equipment

Description	Device	Usage(%)	Impact	Spec	Actual	Receptor	Estimated
				Lmax	Lmax	Distance	Shielding
Crane	No	16		(dBA)	(dBA)	(feet)	(dBA)
				80.6	850	0	

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			Night
	*Lmax	Leq	Day	Leq	Evening	Leq	
			Lmax		Lmax		
Crane	55.9		48 N/A	N/A	N/A	N/A	N/A
Total	55.9		48 N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Building and CNG Dispensing Area Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Impact	Device	Usage(%)	Equipment			Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
				Man Lift	No		
Man Lift	No		20		74.7	560	0
Tractor	No		40	84		580	0
Backhoe	No		40		77.6	580	0
Paver	No		50		77.2	600	0
All Other Equipment > 5 HP	No		50	85		600	0
Roller	No		20		80	620	0
Tractor	No		40	84		620	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			Night
	*Lmax	Leq	Day	Leq	Evening	Leq	
			Lmax		Lmax		
Man Lift	48.7		41.7 N/A	N/A	N/A	N/A	N/A
Man Lift	53.7		46.7 N/A	N/A	N/A	N/A	N/A
Tractor	62.7		58.7 N/A	N/A	N/A	N/A	N/A
Backhoe	56.3		52.3 N/A	N/A	N/A	N/A	N/A
Paver	55.6		52.6 N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	63.4		60.4 N/A	N/A	N/A	N/A	N/A
Roller	58.1		51.1 N/A	N/A	N/A	N/A	N/A
Tractor	62.1		58.2 N/A	N/A	N/A	N/A	N/A
Total	63.4		64.8 N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	850	0
Man Lift	No	20		74.7	850	0
Tractor	No	40	84		850	0
Backhoe	No	40		77.6	850	0
Paver	No	50		77.2	850	0
All Other Equipment > 5 HP	No	50	85		850	0
Roller	No	20		80	850	0
Tractor	No	40	84		850	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A	
Man Lift	50.1	43.1	N/A	N/A	N/A	N/A	N/A	
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	
Paver	52.6	49.6	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	
Roller	55.4	48.4	N/A	N/A	N/A	N/A	N/A	
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	
Total	60.4	61.8	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Nearest Receiver 560'	Residential	65	60	55				
Compressor (air)	No	40			77.7	560	0	

Equipment	Calculated (dBA)	Results					
		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	56.7	52.7	N/A	N/A	N/A	N/A	N/A
Total	56.7	52.7	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	850	0

Equipment	Calculated (dBA)	Results					
		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	53.1	49.1	N/A	N/A	N/A	N/A	N/A
Total	53.1	49.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/1/2019
Case Description: LADWP Mid Valley_Street Improvement of Hazeltine Ave.

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receiver 560'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	560	0
Grader	No	40	85		560	0
Dozer	No	40		81.7	580	0
Backhoe	No	40		77.6	580	0
Front End Loader	No	40		79.1	600	0
Tractor	No	40	84		600	0

Equipment	Results							
	Calculated (dBA)			Noise Limits (dBA)				
	*Lmax	Leq	Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	
Excavator	59.7		55.7	N/A	N/A	N/A	N/A	N/A
Grader	64		60	N/A	N/A	N/A	N/A	N/A
Dozer	60.4		56.4	N/A	N/A	N/A	N/A	N/A
Backhoe	56.3		52.3	N/A	N/A	N/A	N/A	N/A
Front End Loader	57.5		53.5	N/A	N/A	N/A	N/A	N/A
Tractor	62.4		58.4	N/A	N/A	N/A	N/A	N/A
Total	64		64.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----				
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Acoustical Center 850'	Residential	65	60	55

Description	Impact	Device	Usage(%)	Equipment			
				Spec	Actual	Receptor	Estimated
				Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No		40		80.7	850	0
Grader	No		40	85		850	0
Dozer	No		40		81.7	850	0
Backhoe	No		40		77.6	850	0
Front End Loader	No		40		79.1	850	0
Tractor	No		40	84		850	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Excavator	56.1		52.1	N/A	N/A	N/A	N/A
Grader	60.4		56.4	N/A	N/A	N/A	N/A
Dozer	57.1		53.1	N/A	N/A	N/A	N/A
Backhoe	53		49	N/A	N/A	N/A	N/A
Front End Loader	54.5		50.5	N/A	N/A	N/A	N/A
Tractor	59.4		55.4	N/A	N/A	N/A	N/A
Total	60.4		61.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Traffic Noise Model Input / Output

INPUT: ROADWAYS

PN 10649 / 01

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment		
				X	Y		Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft				%	
Dudek											
MG											
INPUT: ROADWAYS PROJECT/CONTRACT: PN 10649 / 01 RUN: LADWP Mid Valley Facility - Existing 2019 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA											
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00					Average
		point2	2	3,607.8	461.4	300.00					
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00					Average
		point5	5	2,286.4	465.1	300.00					
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00					Average
		point8	8	2,290.5	1,023.9	300.00					
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00					Average
		point10	10	2,291.4	-206.3	300.00					
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00					Average
		point6	6	859.6	465.1	300.00					
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00					Average
		point3	3	3,607.5	-219.0	300.00					
Valerio Street - west of Tyrone Ave	30.0	point17	17	940.3	-220.0	300.00					Average
		point18	18	2,296.9	-220.0	300.00					
Valerio Street - east of Tyrone Ave	30.0	point21	21	2,296.9	-220.0	300.00					Average
		point19	19	3,607.9	-220.0	300.00					
Valerio Street - east of Hazeltine Ave	30.0	point22	22	3,607.9	-220.0	300.00					Average
		point20	20	4,244.6	-220.0	300.00					
Van Nuys Blvd. n of Valerio St.	80.0	point27	27	840.0	-200.0	300.00					Average
		point28	28	840.0	1,000.0	300.00					

INPUT: RECEIVERS

PN 10649 / 01

INPUT: RECEIVERS		PN 10649 / 01		8 August 2019		TNM 2.5	
PROJECT/CONTRACT:		PN 10649 / 01		LADWP Mid Valley Facility - Existing 2019			
RUN:		LADWP Mid Valley Facility - Existing 2019					
Receiver							
Name	No.	#DUs	Coordinates (ground)	Height above Ground	Input Sound Levels and Criteria	Active in	
			X Y Z		Existing LAeq1h	Impact Criteria LAeq1h	NR Goal
			ft ft ft		dBA	dBA	dB
M1	1	1	2,432.4 410.5 300.00	5.00	0.00	66	10.0 8.0
M2	2	1	3,521.2 408.9 300.00	5.00	0.00	66	10.0 8.0
M3	3	1	1,105.8 416.5 300.00	5.00	0.00	66	10.0 8.0
Hazeltine Ave N of Valerio St	4	1	3,554.2 301.3 300.00	5.00	0.00	66	10.0 8.0
Tyrone Ave N of Valerio St	6	1	2,347.9 251.8 300.00	5.00	0.00	66	10.0 8.0
Valerio St west of Tyrone Ave	8	1	1,879.4 -174.1 300.00	5.00	0.00	66	10.0 8.0
Valerio St east of Tyrone Ave	9	1	2,991.5 -178.3 300.00	5.00	0.00	66	10.0 8.0
Valerio St east of Hazeltine Ave	11	1	3,853.8 -177.4 300.00	5.00	0.00	66	10.0 8.0

INPUT: BARRIERS

PN 10649 / 01

Dudek MG		8 August 2019 TNM 2.5																	
INPUT: BARRIERS PROJECT/CONTRACT: RUN:				PN 10649 / 01 LADWP Mid Valley Facility - Existing 2019															
Barrier																			
Name	Type	Height Min	Max	If Wall \$ per Unit	If Berm \$ per Unit	Top Width	Run:Rise Unit	Add'tnl \$ per Unit	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Incr- #Up	On #Dn	Struct?	Reflec- tions?	Important	
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft		ft	ft	ft	ft	ft					
5' Wall	W	0.00	99.99	0.00	0.00			0.00	1	2,252.5	426.4	300.00	5.00	0.00	0	0			
Barrier2	W	0.00	99.99	0.00	0.00			0.00	2	956.6	426.4	300.00	5.00	0.00	0	0			
									3	3,556.3	424.8	300.00	5.00	0.00	0	0			
									4	2,345.1	424.8	300.00	5.00	0.00	0	0			

INPUT: ROADWAYS

PN 10649 / 01

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment		
				X	Y		Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft				%	
Dudek											
MG											
INPUT: ROADWAYS PROJECT/CONTRACT: PN 10649 / 01 RUN: LADWP Mid Valley Facility - Ex w Pr 2019											
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00					Average
		point2	2	3,607.8	461.4	300.00					
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00					Average
		point5	5	2,286.4	465.1	300.00					
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00					Average
		point8	8	2,290.5	1,023.9	300.00					
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00					Average
		point10	10	2,291.4	-206.3	300.00					
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00					Average
		point6	6	859.6	465.1	300.00					
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00					Average
		point3	3	3,607.5	-219.0	300.00					
Valerio Street - west of Tyrone Ave	30.0	point17	17	940.3	-220.0	300.00					Average
		point18	18	2,296.9	-220.0	300.00					
Valerio Street - east of Tyrone Ave	30.0	point21	21	2,296.9	-220.0	300.00					Average
		point19	19	3,607.9	-220.0	300.00					
Valerio Street - east of Hazeltine Ave	30.0	point22	22	3,607.9	-220.0	300.00					Average
		point20	20	4,244.6	-220.0	300.00					
Van Nuys Blvd. n of Valerio St.	80.0	point29	29	840.0	-200.0	300.00					Average
		point30	30	840.0	1,000.0	300.00					

INPUT: RECEIVERS

PN 10649 / 01

Receiver Name	No.	#DUs	Coordinates (ground)		Z	Height above Ground	Input Sound Levels and Criteria			Active in Calc.
			X	Y			Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB
Dudek						8 August 2019				
MG						TNM 2.5				
INPUT: RECEIVERS										
PROJECT/CONTRACT:		PN 10649 / 01								
RUN:		LADWP Mid Valley Facility - Ex w Pr 2019								
M1	1	1	2,432.4	410.5	300.00	5.00	0.00	66	10.0	8.0
M2	2	1	3,521.2	408.9	300.00	5.00	0.00	66	10.0	8.0
M3	3	1	1,105.8	416.5	300.00	5.00	0.00	66	10.0	8.0
Hazeltine Ave N of Valerio St	4	1	3,554.2	301.3	300.00	5.00	0.00	66	10.0	8.0
Tyrone Ave N of Valerio St	6	1	2,347.9	251.8	300.00	5.00	0.00	66	10.0	8.0
Valerio St west of Tyrone Ave	8	1	1,879.4	-174.1	300.00	5.00	0.00	66	10.0	8.0
Valerio St east of Tyrone Ave	9	1	2,991.5	-178.3	300.00	5.00	0.00	66	10.0	8.0
Valerio St east of Hazeltine Ave	11	1	3,853.8	-177.4	300.00	5.00	0.00	66	10.0	8.0

INPUT: BARRIERS

PN 10649 / 01

Dudek		8 August 2019																			
MG		TNM 2.5																			
INPUT: BARRIERS																					
PROJECT/CONTRACT:		PN 10649 / 01																			
RUN:		LADWP Mid Valley Facility - Ex w Pr 2019																			
Barrier																					
Name	Type	Height Min	Height ft	Max ft	If Wall \$ per Unit	If Berm \$ per Unit	Top Width ft	Run:Rise ft:ft	Add'tnl \$ per Unit Length \$/ft	No.	Coordinates (bottom) X	Y	Z ft	Height at Point ft	Segment Incr- #Up #Dn #Dn Struct? Reflec- tions?	Segment Incr- #Up #Dn #Dn Struct? Reflec- tions?	Height at Point ft	Z ft	Height at Point ft	Segment Incr- #Up #Dn #Dn Struct? Reflec- tions?	
5' Wall	W	0.00	0.00	99.99	0.00	0.00		0.00		1	2,252.5	426.4	300.00	5.00	0.00	0	5.00	300.00	5.00	0.00	0
Barrier2	W	0.00	0.00	99.99	0.00	0.00		0.00		2	956.6	426.4	300.00	5.00	0.00	0	5.00	300.00	5.00	0.00	0
										3	3,556.3	424.8	300.00	5.00	0.00	0	5.00	300.00	5.00	0.00	0
										4	2,345.1	424.8	300.00	5.00	0.00	0	5.00	300.00	5.00	0.00	0

RESULTS: SOUND LEVELS

PN 10649 / 01

Dudek																								
MG																								
RESULTS: SOUND LEVELS																								
PROJECT/CONTRACT:																								
RUN:																								
BARRIER DESIGN:																								
ATMOSPHERICS:																								
Receiver																								
8 August 2019																								
TNM 2.5																								
Calculated with TNM 2.5																								
PN 10649 / 01																								
LADWP Mid Valley Facility - Ex w Pr 2019																								
INPUT HEIGHTS																								
68 deg F, 50% RH																								

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing			With Barrier			Type Impact	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
					Calculated	Crit'n	dB	Calculated	LAEq1h	dB				
M1	1	1	0.0	55.6	66	55.6	10	-----	55.6	55.6	0.0	8	-8.0	
M2	2	1	0.0	58.8	66	58.8	10	-----	58.8	58.8	0.0	8	-8.0	
M3	3	1	0.0	59.8	66	59.8	10	-----	59.8	59.8	0.0	8	-8.0	
Hazeltine Ave N of Valerio St	4	1	0.0	61.1	66	61.1	10	-----	61.1	61.1	0.0	8	-8.0	
Tyrone Ave N of Valerio St	6	1	0.0	54.7	66	54.7	10	-----	54.7	54.7	0.0	8	-8.0	
Valerio St west of Tyrone Ave	8	1	0.0	62.5	66	62.5	10	-----	62.5	62.5	0.0	8	-8.0	
Valerio St east of Tyrone Ave	9	1	0.0	62.9	66	62.9	10	-----	62.9	62.9	0.0	8	-8.0	
Valerio St east of Hazeltine Ave	11	1	0.0	63.7	66	63.7	10	-----	63.7	63.7	0.0	8	-8.0	

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	8	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

INPUT: ROADWAYS

PN 10649 / 01

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment		
				X	Y		Control Device	Speed Constraint	Pvmt Type	On Struct?	
	ft			ft	ft	ft				%	
Dudek											
MG											
INPUT: ROADWAYS PROJECT/CONTRACT: PN 10649 / 01 RUN: LADWP Mid Valley Facility - Yr 2023 2019 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA											
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00				Average	
		point2	2	3,607.8	461.4	300.00					
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00				Average	
		point5	5	2,286.4	465.1	300.00					
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00				Average	
		point8	8	2,290.5	1,023.9	300.00					
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00				Average	
		point10	10	2,291.4	-206.3	300.00					
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00				Average	
		point6	6	859.6	465.1	300.00					
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00				Average	
		point3	3	3,607.5	-219.0	300.00					
Valerio Street - west of Tyrone Ave	30.0	point17	17	940.3	-220.0	300.00				Average	
		point18	18	2,296.9	-220.0	300.00					
Valerio Street - east of Tyrone Ave	30.0	point21	21	2,296.9	-220.0	300.00				Average	
		point19	19	3,607.9	-220.0	300.00					
Valerio Street - east of Hazeltine Ave	30.0	point22	22	3,607.9	-220.0	300.00				Average	
		point20	20	4,244.6	-220.0	300.00					
Van Nuys Blvd. n of Valerio St.	80.0	point27	27	840.0	-200.0	300.00				Average	
		point28	28	840.0	1,000.0	300.00					

INPUT: TRAFFIC FOR LAeq1h Volumes

PN 10649 / 01

INPUT: TRAFFIC FOR LAeq1h Volumes		8 August 2019		TNM 2.5								
PROJECT/CONTRACT:		PN 10649 / 01		LADWP Mid Valley Facility - Yr 2023 2019								
RUN:		PN 10649 / 01		LADWP Mid Valley Facility - Yr 2023 2019								
Roadway Name	Points Name	Segment No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Hazeltine Ave n. of Covello St	point1	1	89	30	2	30	1	30	0	0	0	0
	point2	2										
Covello St - Hazeltine Ave to Tyrone Av	point4	4	545	30	11	30	6	30	0	0	0	0
	point5	5										
Tyrone Ave n. of Covello St.	point7	7	114	30	2	30	1	30	0	0	0	0
	point8	8										
Tyrone Ave s. of Covello St.	point9	9	114	30	2	30	1	30	0	0	0	0
	point10	10										
Covello St - w. of Tyrone Av	point13	13	601	30	12	30	6	30	0	0	0	0
	point6	6										
Hazeltine Ave s. of Covello St	point14	14	676	30	14	30	7	30	0	0	0	0
	point3	3										
Valerio Street - west of Tyrone Ave	point17	17	875	30	18	30	9	30	0	0	0	0
	point18	18										
Valerio Street - east of Tyrone Ave	point21	21	849	30	18	30	9	30	0	0	0	0
	point19	19										
Valerio Street - east of Hazeltine Ave	point22	22	1029	30	21	30	11	30	0	0	0	0
	point20	20										
Van Nuys Blvd. n of Valerio St.	point27	27	2722	35	56	35	28	35	0	0	0	0
	point28	28										

INPUT: RECEIVERS

PN 10649 / 01

Receiver Name	No.	#DUs	Coordinates (ground)		Z	Height above Ground	Input Sound Levels and Criteria			Active in Calc.	
			X	Y			Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Goal		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Dudek						8 August 2019					
MG						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:											
PN 10649 / 01											
RUN:											
LADWP Mid Valley Facility - Yr 2023 2019											
Receiver											
M1	1	1	2,432.4	410.5	300.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	3,521.2	408.9	300.00	5.00	0.00	66	10.0	8.0	Y
M3	3	1	1,105.8	416.5	300.00	5.00	0.00	66	10.0	8.0	Y
Hazeltine Ave N of Valerio St	4	1	3,554.2	301.3	300.00	5.00	0.00	66	10.0	8.0	Y
Tyrone Ave N of Valerio St	6	1	2,347.9	251.8	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St west of Tyrone Ave	8	1	1,879.4	-174.1	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St east of Tyrone Ave	9	1	2,991.5	-178.3	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St east of Hazeltine Ave	11	1	3,853.8	-177.4	300.00	5.00	0.00	66	10.0	8.0	Y

INPUT: BARRIERS

PN 10649 / 01

Dudek																	
MG			8 August 2019			TNM 2.5											
INPUT: BARRIERS																	
PROJECT/CONTRACT:		PN 10649 / 01															
RUN:		LADWP Mid Valley Facility - Yr 2023 2019															
Barrier																	
Name	Type	Height	If Wall	If Berm	Run:Rise	Top	Width	Point	No.	Coordinates (bottom)	Z	Height at Point	Segment Increase-	Perturbs #Up	On #Dn	Struct?	Important
		Min	\$ per Unit	\$ per Unit	ft:ft	ft	ft			X Y	ft	ft	ft				
		ft	Area \$/sq ft	Vol. \$/cu yd	ft:ft	ft	ft			ft	ft	ft	ft				
5' Wall	W	0.00	99.99	0.00	0.00			point1	1	2,252.5	426.4	300.00	5.00	0.00	0	0	
								point2	2	956.6	426.4	300.00	5.00	0.00	0	0	
Barrier2	W	0.00	99.99	0.00	0.00			point3	3	3,556.3	424.8	300.00	5.00	0.00	0	0	
								point4	4	2,345.1	424.8	300.00	5.00	0.00	0	0	

RESULTS: SOUND LEVELS

PN 10649 / 01

Dudek							8 August 2019		
MG							TNM 2.5		
RESULTS: SOUND LEVELS							Calculated with TNM 2.5		
PROJECT/CONTRACT:	PN 10649 / 01								
RUN:	LADWP Mid Valley Facility - Yr 2023 2019								
BARRIER DESIGN:	INPUT HEIGHTS								
ATMOSPHERICS:	68 deg F, 50% RH								
Receiver	Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.								

Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type Impact	With Barrier		Calculated minus Goal	
					Calculated	Crit'n		Calculated	Noise Reduction		
			dBA	dBA	dBA	dBA		dBA	dBA	dB	
M1	1	1	0.0	55.5	66	55.5	10	55.5	0.0	8	-8.0
M2	2	1	0.0	58.4	66	58.4	10	58.4	0.0	8	-8.0
M3	3	1	0.0	59.8	66	59.8	10	59.8	0.0	8	-8.0
Hazeltine Ave N of Valerio St	4	1	0.0	60.7	66	60.7	10	60.7	0.0	8	-8.0
Tyrone Ave N of Valerio St	6	1	0.0	54.1	66	54.1	10	54.1	0.0	8	-8.0
Valerio St west of Tyrone Ave	8	1	0.0	62.6	66	62.6	10	62.6	0.0	8	-8.0
Valerio St east of Tyrone Ave	9	1	0.0	63.0	66	63.0	10	63.0	0.0	8	-8.0
Valerio St east of Hazeltine Ave	11	1	0.0	63.7	66	63.7	10	63.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	8	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

INPUT: ROADWAYS

PN 10649 / 01

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment	
				X	Y		Control Device	Speed Constraint		Percent Vehicles Affected
	ft			ft	ft	ft		mph	%	
Dudek										
MG										
				8 August 2019						
				TNM 2.5						
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA										
INPUT: ROADWAYS										
PROJECT/CONTRACT: PN 10649 / 01										
RUN: LADWP Mid Villy Fcity - Yr 2023 w P 2019										
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00				Average
		point2	2	3,607.8	461.4	300.00				
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00				Average
		point5	5	2,286.4	465.1	300.00				
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00				Average
		point8	8	2,290.5	1,023.9	300.00				
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00				Average
		point10	10	2,291.4	-206.3	300.00				
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00				Average
		point6	6	859.6	465.1	300.00				
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00				Average
		point3	3	3,607.5	-219.0	300.00				
Valerio Street - west of Tyrone Ave	30.0	point17	17	940.3	-220.0	300.00				Average
		point18	18	2,296.9	-220.0	300.00				
Valerio Street - east of Tyrone Ave	30.0	point21	21	2,296.9	-220.0	300.00				Average
		point19	19	3,607.9	-220.0	300.00				
Valerio Street - east of Hazeltine Ave	30.0	point22	22	3,607.9	-220.0	300.00				Average
		point20	20	4,244.6	-220.0	300.00				
Van Nuys Blvd. n of Valerio St.	80.0	point27	27	840.0	-200.0	300.00				Average
		point28	28	840.0	1,000.0	300.00				

INPUT: TRAFFIC FOR LAeq1h Volumes

PN 10649 / 01

Dudek

8 August 2019

MG

TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: PN 10649 / 01

RUN: LADWP Mid Villy Fcity - Yr 2023 w P 2019

Roadway Name	Points Name	No.	Segment		Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Hazeltime Ave n. of Covello St	point1	1	89	30	2	30	1	30	0	0	0	0	0	0
	point2	2												
Covello St - Hazeltime Ave to Tyrone Av	point4	4	545	30	11	30	6	30	0	0	0	0	0	0
	point5	5												
Tyrone Ave n. of Covello St.	point7	7	142	30	3	30	1	30	0	0	0	0	0	0
	point8	8												
Tyrone Ave s. of Covello St.	point9	9	142	30	3	30	1	30	0	0	0	0	0	0
	point10	10												
Covello St - w. of Tyrone Av	point13	13	601	30	12	30	6	30	0	0	0	0	0	0
	point6	6												
Hazeltime Ave s. of Covello St	point14	14	772	30	16	30	8	30	0	0	0	0	0	0
	point3	3												
Valerio Street - west of Tyrone Ave	point17	17	875	30	18	30	9	30	0	0	0	0	0	0
	point18	18												
Valerio Street - east of Tyrone Ave	point21	21	856	30	18	30	9	30	0	0	0	0	0	0
	point19	19												
Valerio Street - east of Hazeltime Ave	point22	22	1077	30	22	30	11	30	0	0	0	0	0	0
	point20	20												
Van Nuys Blvd. n of Valerio St.	point27	27	2732	35	56	35	28	35	0	0	0	0	0	0
	point28	28												

INPUT: RECEIVERS

PN 10649 / 01

Receiver Name	No.	#DUs	Coordinates (ground)		Z	Height above Ground	Input Sound Levels and Criteria			Active in Calc.	
			X	Y			ft	ft	Existing LAeq1h		Impact Criteria LAeq1h
								dBA	dBA	dB	
Dudek											
MG											
INPUT: RECEIVERS PROJECT/CONTRACT: PN 10649 / 01 RUN: LADWP Mid Vily Fcity - Yr 2023 w P 2019											
M1	1	1	2,432.4	410.5	300.00	5.00	0.00	66	10.0	8.0	Y
M2	2	1	3,521.2	408.9	300.00	5.00	0.00	66	10.0	8.0	Y
M3	3	1	1,105.8	416.5	300.00	5.00	0.00	66	10.0	8.0	Y
Hazeltine Ave N of Valerio St	4	1	3,554.2	301.3	300.00	5.00	0.00	66	10.0	8.0	Y
Tyrone Ave N of Valerio St	6	1	2,347.9	251.8	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St west of Tyrone Ave	8	1	1,879.4	-174.1	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St east of Tyrone Ave	9	1	2,991.5	-178.3	300.00	5.00	0.00	66	10.0	8.0	Y
Valerio St east of Hazeltine Ave	11	1	3,853.8	-177.4	300.00	5.00	0.00	66	10.0	8.0	Y

INPUT: BARRIERS

PN 10649 / 01

Dudek		8 August 2019																	
MG		TNM 2.5																	
INPUT: BARRIERS																			
PROJECT/CONTRACT:		PN 10649 / 01																	
RUN:		LADWP Mid Vily Fcity - Yr 2023 w P 2019																	
Barrier																			
Name	Type	Height		Max	If Wall \$ per Unit	If Berm \$ per Unit	Top Width	Run:Rise	Add'tnl \$ per Unit	Name	Coordinates (bottom)		Z	Height at Point	Segment Increase-#Up	Perturbs #Dn	On Struct?	Important Reflec-tions?	
		Min	ft								X	Y							ft
		ft	ft	ft	\$/sq ft	\$/cu yd	ft	ft/ft	\$/ft		ft	ft	ft	ft	ft				
5' Wall	W	0.00	99.99	0.00	0.00				0.00	point1	1	2,252.5	426.4	300.00	5.00	0.00	0	0	
										point2	2	956.6	426.4	300.00	5.00	0.00	0	0	
Barrier2	W	0.00	99.99	0.00	0.00				0.00	point3	3	3,556.3	424.8	300.00	5.00	0.00	0	0	
										point4	4	2,345.1	424.8	300.00	5.00	0.00	0	0	

RESULTS: SOUND LEVELS

PN 10649 / 01

Dudek						8 August 2019						
MG						TNM 2.5						
RESULTS: SOUND LEVELS						Calculated with TNM 2.5						
PROJECT/CONTRACT:			PN 10649 / 01									
RUN:			LADWP Mid Vily Fcity - Yr 2023 w P 2019									
BARRIER DESIGN:			INPUT HEIGHTS						Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing		No Barrier		Increase over existing		Type		With Barrier	
			LAeq1h	LAeq1h	LAeq1h	LAeq1h	Calculated	Crit'n	Impact	Calculated	Calculated	Calculated
			dBA	dBA	dBA	dBA	dBA		dB		dB	dB
M1	1	1	0.0	55.6	66	55.6	66	10	----	55.6	55.6	8
M2	2	1	0.0	58.8	66	58.8	66	10	----	58.8	58.8	8
M3	3	1	0.0	59.9	66	59.9	66	10	----	59.9	59.9	8
Hazeltine Ave N of Valerio St	4	1	0.0	61.2	66	61.2	66	10	----	61.2	61.2	8
Tyrone Ave N of Valerio St	6	1	0.0	54.8	66	54.8	66	10	----	54.8	54.8	8
Valerio St west of Tyrone Ave	8	1	0.0	62.6	66	62.6	66	10	----	62.6	62.6	8
Valerio St east of Tyrone Ave	9	1	0.0	63.0	66	63.0	66	10	----	63.0	63.0	8
Valerio St east of Hazeltine Ave	11	1	0.0	63.8	66	63.8	66	10	----	63.8	63.8	8
Dwelling Units			# DUs		Noise Reduction							
			Min	Avg	Max							
			dB	dB	dB							
All Selected		8	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: ROADWAYS

PN 8584 / 13

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment	
				X	Y		Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type
	ft			ft	ft	ft		mph	%	
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00				Average
		point2	2	3,607.8	461.4	300.00				
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00				Average
		point5	5	2,286.4	465.1	300.00				
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00				Average
		point8	8	2,290.5	1,023.9	300.00				
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00				Average
		point10	10	2,291.4	-206.3	300.00				
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00				Average
		point6	6	910.4	465.1	300.00				
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00				Average
		point3	3	3,607.5	-224.4	300.00				

INPUT: ROADWAYS
 PROJECT/CONTRACT: PN 8584 / 13
 RUN: LADWP Mid Valley Facility - Yr 2026

8 August 2019
 TNM 2.5

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

INPUT: TRAFFIC FOR LAeq1h Volumes PN 8584 / 13

Dudek																					
MG																					
INPUT: TRAFFIC FOR LAeq1h Volumes																					
PROJECT/CONTRACT:																					
RUN:																					

PN 8584 / 13
 LADWP Mid Valley Facility - Yr 2026

Roadway Name	Points Name	No.	Segment	Autos			MTrucks			HTrucks			Buses			Motorcycles		
				V	S	mph	V	S	mph	V	S	mph	V	S	mph	V	S	mph
				veh/hr	mph	veh/hr	veh/hr	mph	veh/hr	veh/hr	mph	veh/hr	veh/hr	mph	veh/hr	veh/hr	veh/hr	mph
Hazeltiline Ave n. of Covello St	point1	1		98	30	2	30	1	30	0	0	0	0	0	0	0		
	point2	2																
Covello St - Hazeltiline Ave to Tyrone Av	point4	4		616	30	13	30	6	30	0	0	0	0	0	0			
	point5	5																
Tyrone Ave n. of Covello St.	point7	7		121	30	3	30	1	30	0	0	0	0	0	0			
	point8	8																
Tyrone Ave s. of Covello St.	point9	9		122	30	3	30	1	30	0	0	0	0	0	0			
	point10	10																
Covello St - w. of Tyrone Av	point13	13		677	30	14	30	7	30	0	0	0	0	0	0			
	point6	6																
Hazeltiline Ave s. of Covello St	point14	14		619	30	13	30	6	30	0	0	0	0	0	0			
	point3	3																

INPUT: RECEIVERS

PN 8584 / 13

Receiver Name	No.	#DUs	Coordinates (ground)		Z	Height above Ground	Input Sound Levels and Criteria			Active in Calc.	
			X	Y			Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Goal		
			ft	ft	ft	ft	dBA	dBA	dB		
M3	1	1	1,105.8	416.5	300.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	2,432.4	410.5	300.00	5.00	0.00	66	10.0	8.0	Y
Hazeltine Ave s. of Covello St.	3	1	3,554.2	301.3	300.00	5.00	0.00	66	10.0	8.0	Y
Tyrone Ave s. of Covello St.	4	1	2,347.9	251.8	300.00	5.00	0.00	66	10.0	8.0	Y
M2	6	1	3,521.2	408.9	300.00	5.00	0.00	66	10.0	8.0	Y

8 August 2019
TNM 2.5

PN 8584 / 13
LADWP Mid Valley Facility - Yr 2026

INPUT: BARRIERS

PN 8584 / 13

Dudek		8 August 2019																			
MG		TNM 2.5																			
INPUT: BARRIERS																					
PROJECT/CONTRACT:		PN 8584 / 13																			
RUN:		LADWP Mid Valley Facility - Yr 2026																			
Barrier																					
Name	Type	Height		If Wall	\$ per Unit	Area	\$ /sq ft	If Berm	\$ per Unit	Top Width	Run:Rise	Add'tnl \$ per Unit	Coordinates (bottom)		Z	Height at Point	Segment Increase-#Up	On #Dn	Struct? Reflec-tions?	Important	
		Min	ft										X	Y							ft
5' Wall	W	0.00	99.99	0.00							0.00		1	2,252.5	426.4	300.00	5.00	0.00	0	0	
													2	956.6	426.4	300.00	5.00	0.00	0	0	
Barrier2	W	0.00	99.99	0.00							0.00		3	3,556.3	424.8	300.00	5.00	0.00	0	0	
													4	2,345.1	424.8	300.00	5.00	0.00	0	0	

RESULTS: SOUND LEVELS

PN 8584 / 13

Dudek																			
MG																			
RESULTS: SOUND LEVELS																			
PROJECT/CONTRACT:																			
RUN:																			
BARRIER DESIGN:																			
ATMOSPHERICS:																			
Receiver																			
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing Calculated	Crit'n	Increase over existing Calculated	Crit'n	Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal					
			dBA	dBA	dBA	dBA	dBA	dBA			dBA	dBA	dBA						
M3	1	1	0.0	55.9	55.9	66	55.9	66	10	----	55.9	0.0	8						
M1	2	1	0.0	55.7	55.7	66	55.7	66	10	----	55.7	0.0	8						
Hazeltine Ave s. of Covello St.	3	1	0.0	60.2	60.2	66	60.2	66	10	----	60.2	0.0	8						
Tyrone Ave s. of Covello St.	4	1	0.0	54.0	54.0	66	54.0	66	10	----	54.0	0.0	8						
M2	6	1	0.0	58.2	58.2	66	58.2	66	10	----	58.2	0.0	8						
Dwelling Units	# DUs	Noise Reduction																	
		Min	Avg	Max															
		dBA	dBA	dBA															
All Selected	5	0.0	0.0	0.0															
All Impacted	0	0.0	0.0	0.0															
All that meet NR Goal	0	0.0	0.0	0.0															

INPUT: ROADWAYS

PN 8584 / 13

Roadway Name	Width	Points Name	No.	Coordinates (pavement)		Z	Flow Control		Segment	
				X	Y		Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type
	ft			ft	ft	ft		mph	%	
Hazeltine Ave n. of Covello St	45.0	point1	1	3,608.2	1,218.9	300.00				Average
		point2	2	3,607.8	461.4	300.00				
Covello St - Hazeltine Ave to Tyrone Av	28.0	point4	4	3,593.2	465.1	300.00				Average
		point5	5	2,286.4	465.1	300.00				
Tyrone Ave n. of Covello St.	45.0	point7	7	2,290.1	482.3	300.00				Average
		point8	8	2,290.5	1,023.9	300.00				
Tyrone Ave s. of Covello St.	45.0	point9	9	2,291.0	444.5	300.00				Average
		point10	10	2,291.4	-206.3	300.00				
Covello St - w. of Tyrone Av	28.0	point13	13	2,286.4	465.1	300.00				Average
		point6	6	910.4	465.1	300.00				
Hazeltine Ave s. of Covello St	45.0	point14	14	3,607.8	461.4	300.00				Average
		point3	3	3,607.5	-224.4	300.00				

INPUT: ROADWAYS
 PROJECT/CONTRACT: PN 8584 / 13
 RUN: LADWP Mid Valley Facility - Yr 2026wPrj

INPUT: TRAFFIC FOR LAeq1h Volumes

PN 8584 / 13

Dudek			8 August 2019												
MG			TNM 2.5												

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: PN 8584 / 13

RUN: LADWP Mid Valley Facility - Yr 2026wPrj

Roadway Name	Points Name	No.	Segment	Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Hazelatine Ave n. of Covello St	point1	1		102	30	2	30	5	30	0	0	0	0
	point2	2											
Covello St - Hazelatine Ave to Tyrone Av	point4	4		629	30	13	30	10	30	0	0	0	0
	point5	5											
Tyrone Ave n. of Covello St.	point7	7		290	30	6	30	3	30	0	0	0	0
	point8	8											
Tyrone Ave s. of Covello St.	point9	9		223	30	5	30	2	30	0	0	0	0
	point10	10											
Covello St - w. of Tyrone Av	point13	13		732	30	15	30	10	30	0	0	0	0
	point6	6											
Hazelatine Ave s. of Covello St	point14	14		635	30	13	30	10	30	0	0	0	0
	point3	3											

INPUT: RECEIVERS

PN 8584 / 13

Receiver Name	No.	#DUs	Coordinates (ground)		Z	Height above Ground	Input Sound Levels and Criteria			Active in Calc.	
			X	Y			Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Goal		
			ft	ft	ft	ft	dBA	dBA	dB		
M3	1	1	1,105.8	416.5	300.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	2,432.4	410.5	300.00	5.00	0.00	66	10.0	8.0	Y
Hazeltine Ave s. of Covello St.	3	1	3,554.2	301.3	300.00	5.00	0.00	66	10.0	8.0	Y
Tyrone Ave s. of Covello St.	4	1	2,347.9	251.8	300.00	5.00	0.00	66	10.0	8.0	Y
M2	6	1	3,521.2	408.9	300.00	5.00	0.00	66	10.0	8.0	Y

8 August 2019
TNM 2.5

PN 8584 / 13

LADWP Mid Valley Facility - Yr 2026wPrj

INPUT: RECEIVERS

PROJECT/CONTRACT:

RUN:

Receiver

INPUT: BARRIERS

PN 8584 / 13

Dudek																				
MG																				
INPUT: BARRIERS																				
PROJECT/CONTRACT:																				
RUN:																				
Barrier																				
Name	Type	Height Min	Max	If Wall \$ per Unit	If Berm \$ per Unit	Top Width	Run:Rise Unit	Add'tnl \$ per Unit	Points			No. Coordinates (bottom)	X	Y	Z	Height at Point	Segment Incre- #Up #Dn #Dn Struct? Reflec- tions?	Important		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft/ft	\$/ft					ft	ft	ft	ft				
5' Wall	W	0.00	99.99	0.00	0.00			0.00	point1	1	2,252.5	426.4	300.00	5.00	0.00	0	0			
									point2	2	956.6	426.4	300.00	5.00	0.00	0	0			
Barrier2	W	0.00	99.99	0.00	0.00			0.00	point3	3	3,556.3	424.8	300.00	5.00	0.00	0	0			
									point4	4	2,345.1	424.8	300.00	5.00	0.00	0	0			

RESULTS: SOUND LEVELS

PN 8584 / 13

Dudek																							
MG																							
RESULTS: SOUND LEVELS																							
PROJECT/CONTRACT:																							
RUN:																							
BARRIER DESIGN:																							
ATMOSPHERICS:																							
Receiver																							
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing Calculated	Crit'n	Calculated	Crit'n	Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal									
			dB	dB	dB	dB	dB	dB			dB	dB	dB	dB									
M3	1	1	0.0	56.6	66	56.6	66	10	-----	10	56.6	0.0	8	-8.0									
M1	2	1	0.0	56.8	66	56.8	66	10	-----	10	56.8	0.0	8	-8.0									
Hazeltine Ave s. of Covello St.	3	1	0.0	60.7	66	60.7	66	10	-----	10	60.7	0.0	8	-8.0									
Tyrone Ave s. of Covello St.	4	1	0.0	56.3	66	56.3	66	10	-----	10	56.3	0.0	8	-8.0									
M2	6	1	0.0	58.9	66	58.9	66	10	-----	10	58.9	0.0	8	-8.0									
Dwelling Units	# DUs	Noise Reduction	Min	Avg	Max																		
		dB	dB	dB	dB																		
All Selected	5	0.0	0.0	0.0	0.0																		
All Impacted	0	0.0	0.0	0.0	0.0																		
All that meet NR Goal	0	0.0	0.0	0.0	0.0																		

APPENDIX F

Transportation Impact Study

**Transportation Impact Study
Mid Valley Water Facility, City of Los Angeles**

Prepared for:

Los Angeles Department of Water and Power (LADWP)
111 N. Hope Street, Room 1044
Los Angeles, California 90012
Contact: Nancy Chung

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Dennis Pascua, Transportation Services Manager

MARCH 2019

Transportation Impact Study – Mid Valley Water Facility

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Transportation Impact Study – Mid Valley Water Facility

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Transportation Impact Study – Mid Valley Water Facility

1 INTRODUCTION

1.1 Purpose and Scope of the TIS

The purpose of this Transportation Impact Study (TIS) is to identify traffic impacts associated with the proposed Los Angeles Department of Water and Power (LADWP) Mid Valley Water Facility project (proposed project) in the City of Los Angeles (City). This TIS has been prepared per the *City of Los Angeles Department of Transportation (LADOT) Transportation Impact Study Guidelines (December 2016)*, and per an approved Transportation Impact Study Memorandum of Understanding (MOU) by LADOT. A copy of the approved MOU is provided in Appendix A.

The objectives of this TIS are:

- Document existing traffic conditions, including intersection levels of service in the study area;
- Estimate trip generation, distribution, and assignment characteristics for the proposed project;
- Analyze the traffic impacts that would occur as a result of project traffic under the Existing and Future 2023 conditions;
- Describe the significance of the potential impacts under the Existing and Future 2023 conditions;
- Identify mitigation measures for any significantly impacted transportation facilities;
- Describe the adequacy of project access locations; and,
- Describe active transportation and transit facilities in the vicinity of the project site.

Dudek analyzed study area intersections for the following study scenarios:

Existing Condition

The TIS includes a description of existing traffic conditions in the site vicinity, including the existing roadway system, existing weekday AM and PM peak hour traffic volumes, and traffic operations. The existing condition is representative of the year 2018.

Existing plus Project

This condition includes analysis of traffic operations under existing conditions with project-related traffic added to the existing AM and PM peak hour traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining project's significant impacts.

Transportation Impact Study – Mid Valley Water Facility

Future 2023

The Future 2023 scenario includes a description of traffic conditions and operations within a short-term horizon period where the proposed project is constructed and fully occupied. An ambient annual growth factor of 0.54% based on the Los Angeles County Congestion Management Program for the region in which the project is located was applied to the existing year (2018) traffic volumes over the course of five years to estimate future baseline traffic volumes in the year 2023.

Along with ambient growth, traffic generated by other approved and pending projects in the study area was also added to existing traffic volumes. These approved or pending projects are developments in the review process, but not fully approved; or, projects that have been approved, but not fully constructed or occupied. Although traffic from all these projects is estimated in the cumulative trip generation summary for future projects, only a reasonable percentage that is likely to utilize the study area network is assigned to the roadway facilities analyzed in the TIS.

Future 2023 plus Project

This condition includes analysis of traffic operations under the Future 2023 condition (described above) with project-related traffic added to the AM and PM peak hour traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining the project's significant impacts.

1.2 Project Description, Location and Study Area

The proposed Mid Valley Water Facility site is located at 7600 North Tyrone Avenue in the Van Nuys area of the City of Los Angeles, adjacent to the existing LADWP Valley Center site occupied by the Power System. The parcel on which the Project site is primarily located is Assessor's Parcel Number 2215001913 (City of Los Angeles 2016). Figure 1 shows the project location, study area, and regional location of the project site.

The project site is approximately 17.3 acres of empty property already owned by LADWP. Access to the site would be provided from both Tyrone Avenue on the southwest and Hazeltine Avenue on the southeast, as shown in Figure 2, Preliminary Site Plan. The closest major roadway to the project site is Van Nuys Boulevard, located approximately two blocks to the west. The project site is shown in Figure 2. The project would also include improvements along approximately 323 linear feet of Hazeltine Avenue, which is a north-south City of Los Angeles roadway.

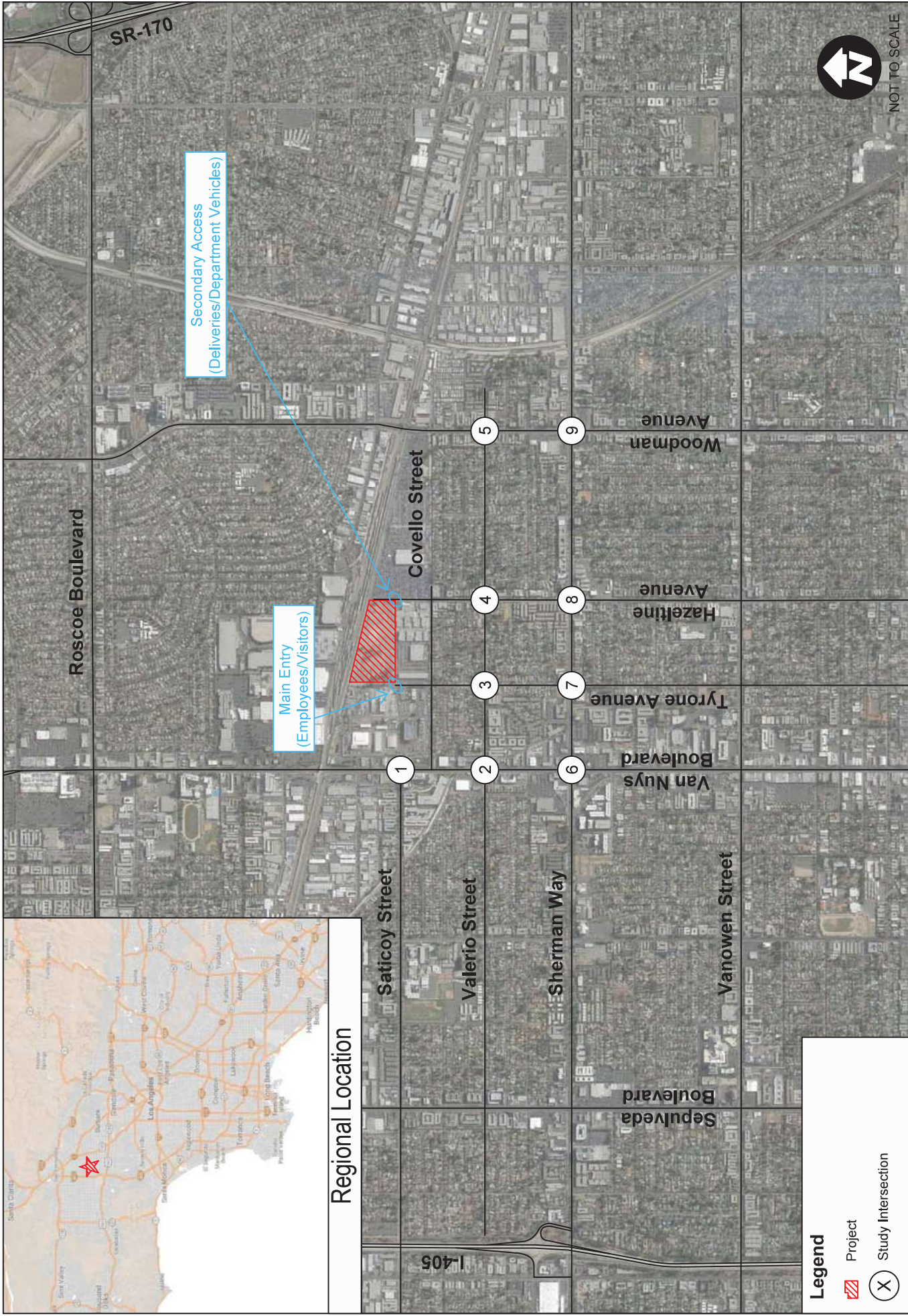


FIGURE 1
Project Location and Study Area
 LADWP - Mid Valley Water Facility

Source: Google Maps, 06/2018



Transportation Impact Study – Mid Valley Water Facility

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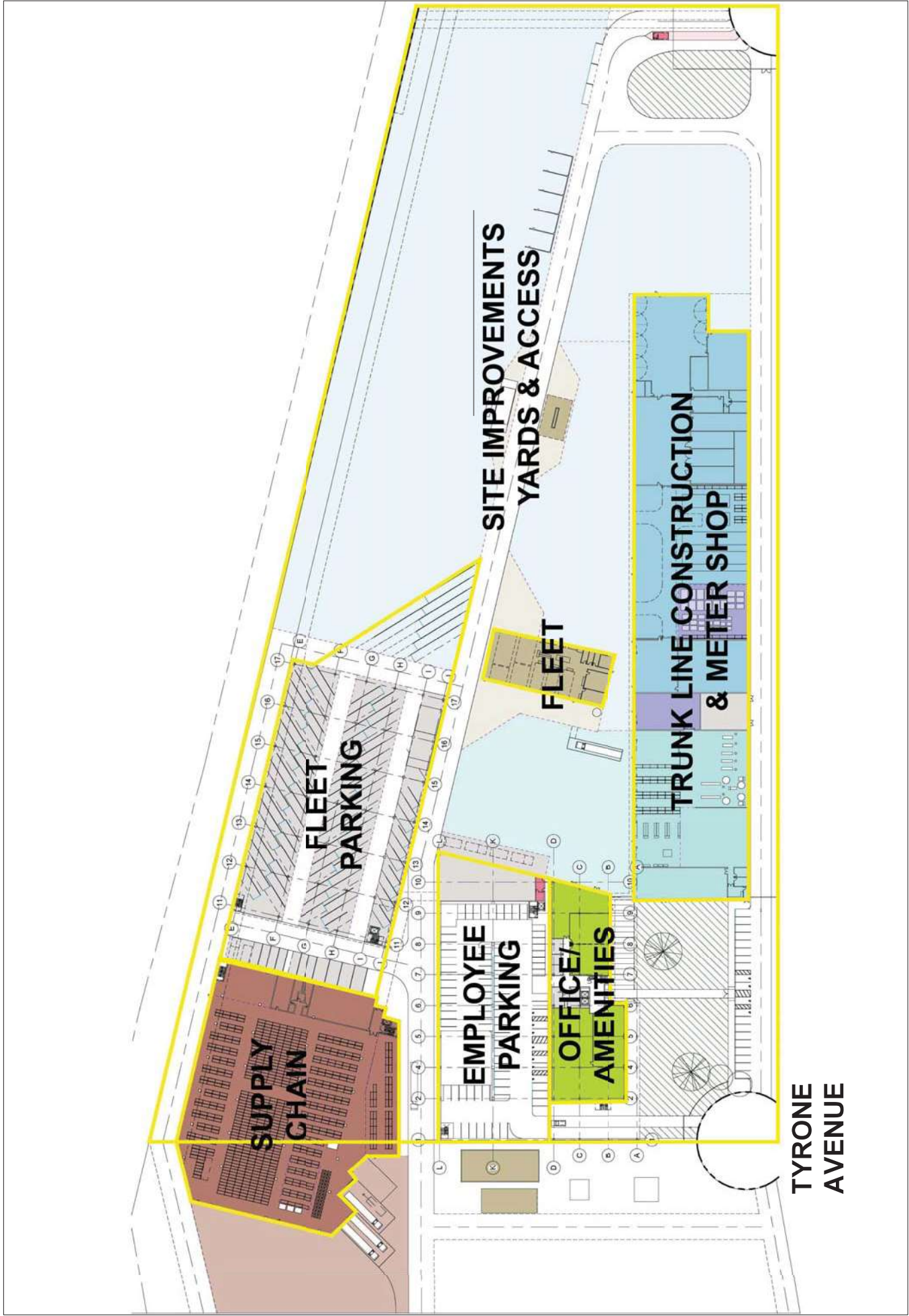


FIGURE 2
Preliminary Site Plan
LADWP - Mid Valley Water Facility

Transportation Impact Study – Mid Valley Water Facility

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Transportation Impact Study – Mid Valley Water Facility

LADWP owns this approximately 17-acre site, and a number of the water divisions are dispersed at out-of-date facilities throughout the entire San Fernando Valley; therefore, LADWP desires to consolidate all divisions onto one site. The proposed project would house the following components, as outlined in Table 1 below.

**Table 1
Project Components**

Building/Area	No. of Staff (year 2022)	Component/ Group/Function
Trunk Line	152	Water distribution and trunk line construction and maintenance
Meter Shop	51	Meter and Services
Main Line	114	Water main line maintenance
Emergency Operations Center/Trouble Board	34	Emergency Operation Center
Security	2	On-site security
Supply Chain Services	54	Warehouse storage
Fleet Services	9	Fleet vehicle maintenance
CNG Fueling	0	Fleet vehicle fueling
Total	416	

Source: Los Angeles Department of Water & Power, *Feasibility Study Revision B*, September 2017.

As illustrated in Figure 1, the study area is comprised of the following nine intersections segments, all within City limits:

Intersections

1. Van Nuys Boulevard/Saticoy Street (signalized)
2. Van Nuys Boulevard/Valerio Street (signalized)
3. Tyrone Avenue/Valerio Street (signalized)
4. Hazeltine Avenue/Valerio Street (signalized)
5. Woodman Avenue/Valerio Street (signalized)
6. Van Nuys Boulevard/Sherman Way (signalized)
7. Tyrone Avenue/Sherman Way (signalized)
8. Hazeltine Avenue/Sherman Way (signalized)
9. Woodman Avenue/Sherman Way (signalized)

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1.3 Significance Thresholds

The study area intersections are located within the jurisdiction of the City of Los Angeles. The significance criteria for the City Los Angeles is described in the section below. The study area does not include any Caltrans facilities, therefore Caltrans criteria has not been utilized in this traffic analysis.

1.3.1 Los Angeles Department of Transportation (LADOT)

The proposed project is located within the City of Los Angeles and uses the significance criteria provided in the LADOT *Transportation Impact Study Guidelines* (December 2016). LADOT has adopted the following significance criteria to assess whether the addition of project trips would cause a significant impact on study area intersections:

A significant impact would occur if a land development project increases the volume to capacity (V/C) ratio equals or exceeds the thresholds shown in Table 2.

Table 2
Significance Criteria for Local Signalized Intersections for Development Projects

Level of Service	Final V/C Ratio	Project-Related Increase in V/C
C	0.701 to 0.800	equal to or greater than 0.040
D	0.801 to 0.900	equal to or greater than 0.020
E	0.901 to 1.000	equal to or greater than 0.010
F	Greater than 1.000	equal to or greater than 0.010

Source: LADOT, *Transportation Impact Study Guidelines*, 2016.

Per LADOT, for development projects, unsignalized intersections should be evaluated solely to determine the need for the permanent installation of a traffic signal or other traffic control device(s).

Mitigation Measures

LADOT guidelines mention if a TIS identifies project-related impacts then mitigation measures that should be considered include, Transportation Demand Management, Transit Capacity and Access Improvements, Parking Management Measures, Jobs/Housing Balance measures, Traffic signal Operational Improvements, Street Restriping, Physical Street Improvements, Fair Share Contributions, Transportation Mitigation Trust Fund etc. If mitigation measures are deemed to be infeasible, and no substitute mitigation measures (an environmentally equivalent or superior to the original measure in mitigating the project's significant impact) are feasible, then a significant transportation impact would remain. For projects with unmitigated transportation impacts, a Statement of Overriding Considerations should evaluate and consider suitable enhancements that improve quality of life in the public realm, such as non-restrictive traffic calming, traffic safety

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enhancements, signal timing upgrades, and community streetscape features (e.g., lighting, landscaping, shade, sidewalk repairs etc.)

1.4 Analysis Methodology

Level of service (LOS) is commonly used as a qualitative description of roadway segments and intersection operations and is based on the design capacity of the roadway segment or intersection configuration, compared to the volume of traffic using the roadway segment or intersection.

1.4.1 Freeway Impact Analysis

Pursuant to the Freeway Impact Analysis Procedures agreement executed in October 2013 between LADOT and Caltrans District 7, as amended in December 2015, traffic studies may be required to conduct a focused freeway impact analysis in addition to the CMP analysis. Freeway mainline segments and off-ramps in the project vicinity that are forecast to receive net new project trips are subject to freeway impact analysis screening. This screening analysis is based solely on the comparisons between the expected net new project-related traffic volumes and the capacity of the subject mainline freeway segments and freeway off-ramps. Thus, cumulative conditions (i.e., related project's traffic volumes and regional growth) are not considered for purposes of the screening analysis. Based on the screening criteria included in the scoping agreement (Appendix A), the amount of peak hour project-related traffic expected to occur on the freeway system is not expected to meet the criteria for freeway impact analysis. Thus, no further analysis of potential impacts to the I-405 and SR-170 mainline freeway system or ramp intersections is required.

1.4.2 Intersection Analysis

Per City of Los Angeles Department of Transportation (LADOT) *Transportation Impact Study Guidelines* (December 2016) the intersection evaluation methodology to assess transportation impacts is based on the Transportation Research Board, Circular 212 Critical Movement Analysis (CMA) Planning Method for analyzing traffic operating conditions at study intersections. CMA is a method that determines the volume-to-capacity (V/C) ratio on a critical lane basis and the level of service associated with each V/C ratio at an intersection.

The operational characteristics of an intersection are determined by calculating the intersection's level of service (LOS). The intersection as a whole and its individual turning movements can be described alphabetically with a range of LOS (A through F), with LOS A indicating free-flow traffic and LOS F indicating extreme congestion and long vehicle delays.

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Table 3
Level of Service Definitions Using Critical Movement Analysis Methodology for
Signalized Intersections

Level of Service	V/C Ratio	General Description
A	≤0.600	Free flow
B	0.601 to ≤0.700	Stable flow (slight delays)
C	0.701 to ≤0.800	Stable flow (acceptable delays)
D	0.801 to ≤0.900	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	0.901 to ≤1.00	Unstable flow (intolerable delay)
F	>1.00	Forced flow (jammed)

Source: LADOT 2016.

1.4.3 Congestion Management Program Analysis

The applicable congestion management program (CMP) for the project area and the surrounding metropolitan area is the Los Angeles County Metropolitan Transportation Authority’s (Metro) 2010 CMP. This program monitors and sets performance indicators for a transportation network of numerous highway segments, freeways, and key roadway intersections throughout Los Angeles County (called the CMP Highway and Roadway System). In the vicinity of the project, I-405 and SR-170 is part of the CMP Highway and Roadway System.

The CMP requires analysis of arterial monitoring intersections where a project will add 50 or more trips during either the morning peak traffic hour (AM peak hour) or evening peak traffic hour (PM peak hour) and CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips (by direction) during either the AM or PM peak hour. The CMP indicates that a project would have a significant impact if project traffic increases the volume to capacity (v/c) ratio of a facility by 0.02 or more at a facility operating at LOS F.

1.4.4 California Senate Bill 743 and Vehicle Miles Traveled Analysis

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or automobile delay, will no longer be considered an environmental impact under CEQA.

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The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. OPR's regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines must be implemented statewide by January 1, 2020. The traffic analysis in this section relies on LOS to characterize impacts since the MOU for traffic analysis for the proposed project was approved by LADOT in November 2018, which was prior to approval of the revised CEQA Guidelines.

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2 EXISTING CONDITIONS

This section describes existing conditions within the study area. Characteristics are provided for the existing roadway system, daily roadway segment traffic volumes, peak hour traffic volumes, and traffic operations.

2.1 Roadway System

The existing traffic controls and geometrics at the study area intersections are shown in Figure 3. All the intersections identified in the study area are signalized. Characteristics of the existing street system in the study are described below.

Interstate 405 (I-405), also known as the San Diego Freeway, is a north-south, ten-lane, divided freeway located west of the project site. The posted speed limit is 65 miles per hour (mph), and interchanges in the study area are located at Sherman Way and Roscoe Boulevard.

State Route 170 (SR-170), also known as the Hollywood Freeway, is a ten-lane, divided freeway located east of the project site. The posted speed limit is 65 mph, and interchanges in the study area are located at Sherman Way and Roscoe Boulevard.

Van Nuys Boulevard is a north-south, six-lane, undivided roadway in the study area, and is designated as *Boulevard II* by the City of Los Angeles Mobility Plan 2035. The posted speed limit is 35 mph, and a two-way left turn lane (TWLTL) is located along the roadway south of Saticoy Boulevard. Parking from 8:00 am to 6:00 pm is restricted to two hours along both sides of the street.

Woodman Avenue is a north-south, six-lane, undivided roadway with a TWLTL in the study area, and is designated as *Avenue I* by the City of Los Angeles Mobility Plan 2035. The posted speed limit is 35 mph. No stopping is allowed Monday through Friday, from 3:00 pm and 6:00 pm along the east side of the street, and no stopping is allowed at any time along the west side of the street.

Tyrone Avenue is a north-south, two-lane, undivided roadway in the study area, and is designated as a *Collector Street* by the City of Los Angeles Mobility Plan 2035. The posted speed limit is 25 mph, and parking is allowed along both sides of the street.

Hazeltine Avenue is a north-south, two-lane, undivided roadway in the study area, and is designated as a *Collector Street* by the City of Los Angeles Mobility Plan 2035. The posted speed limit is 25 mph, and parking is allowed along both sides of the street.

Sherman Way is an east-west, six-lane, undivided road with a TWLTL in the study area, and becomes a divided road west of Van Nuys Boulevard. Sherman Way is designated as *Boulevard II* by the City of Los Angeles Mobility Plan 2035, and the posted speed limit is 35 mph. Parking is

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allowed along the west side of the street; however, no parking is allowed along the east side of the street Monday through Friday, from 4:00 pm to 7:00 pm.

Saticoy Street is an east-west, four-lane, undivided road with a TWLTL in the study area, and is designated as *Avenue II* by the City of Los Angeles Mobility Plan 2035. Saticoy Street becomes a two-lane road east of Van Nuys Boulevard, and terminates approximately 200 feet east of the intersection at a private LADWP gate. The posted speed limit is 35 mph, and parking is allowed along both sides of the street.

Valerio Street is an east-west, two-lane, undivided road in the study area, and is designated as a *Collector Street* by the City of Los Angeles Mobility Plan 2035. The posted speed limit is 30 mph, and parking is allowed along both sides of the street.

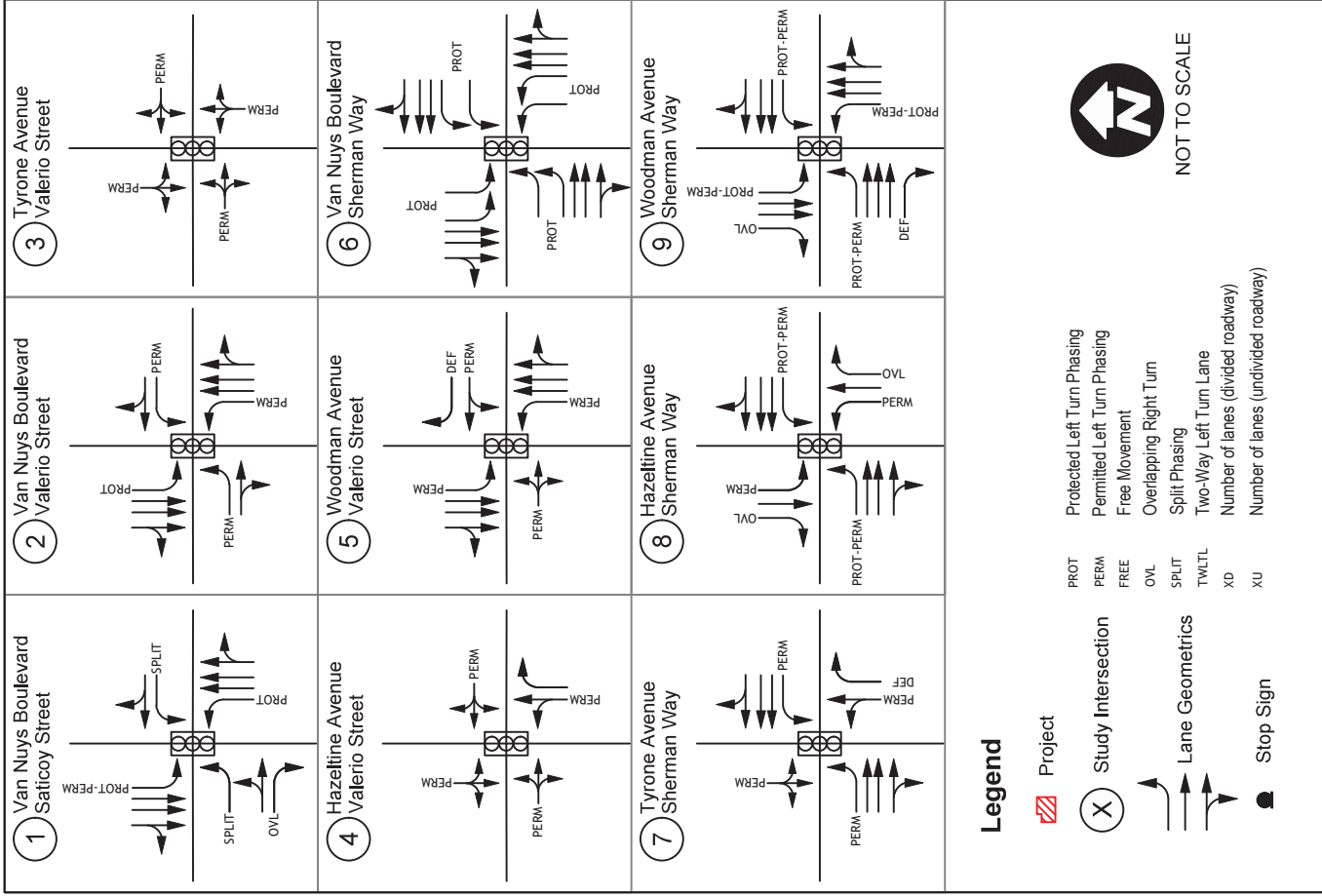


FIGURE 3
Existing Intersection Controls and Geometrics
LADWP - Mid Valley Water Facility

Source: Google Maps, 06/2018



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2.2 Transit System

The Los Angeles County Metropolitan Transportation Authority (Metro) and LADOT – DASH provide public transit service (bus and rail) within the service area. The project is located approximately 0.75 miles from the Van Nuys Amtrak/Metrolink station. The following routes serve the study area:

Metrolink

- **Ventura County Line** provides service from Oxnard to the Los Angeles Union Station every 40 to 120 minutes during peak frequency.

Amtrak

- **Pacific Surfliner** provides service from San Luis Obispo to San Diego every 10 to 120 minutes during peak frequency.

Metro (bus)

- **Route 744** provides service from Northridge/Pacoima to Sherman Oaks along Van Nuys Boulevard, Reseda Boulevard, and Ventura Boulevard. Peak service frequency averages approximately 20 minutes.
- **Route 788** provides service from Arleta to West Los Angeles along Van Nuys Boulevard and I-405. Peak service frequency averages approximately 15 minutes.
- **Route 233** provides service from Lakeview Terrace to Sherman Oaks along Van Nuys Boulevard. Peak service frequency averages approximately 12 to 15 minutes.
- **Route 169** provides service from Bob Hope Airport to Woodland Hills along Saticoy Street and Van Nuys Boulevard. This route runs every hour during peak frequency.
- **Route 656** provides service from Mission Hills to Hollywood along Van Nuys Boulevard, Burbank Boulevard, Chandler Boulevard, and Cahuenga Boulevard. This route runs every hour during peak frequency.
- **Route 162/163** provides service from Sun Valley to West Hills along Sherman Way and Lankershim Boulevard. Peak service frequency ranges from 11 to 45 minutes.

LADOT – DASH

- **Panorama City/Van Nuys** offers neighborhood shuttle service within and between Panorama City and Van Nuys via Van Nuys Boulevard, Sepulveda Boulevard, Saticoy Street, and Sherman Way. Service averages approximately 20 minutes during peak frequency.

2.3 Pedestrian and Bicycle Facilities

2.3.1 Pedestrian Facilities

The study area serves many active transportation users due to its proximity to the Van Nuys Amtrak and Metrolink train station. Tyrone Avenue has paved sidewalk along its eastern side, whereas Hazeltine Avenue has intermittent sidewalk along its western side in the vicinity of the project site. All other study area roadways are constructed with curbs, gutters, and sidewalks along both sides of all streets within the study area with the exception of Valerio Street, which consists of intermittent sidewalk segments. The majority of Van Nuys Boulevard and stretches of Sherman Way and Saticoy Street are identified as Pedestrian-Enhanced Districts (PEDs) within the study area by the City of Los Angeles Mobility Plan 2035. PEDs are areas identified by the City of Los Angeles where “pedestrian improvements on arterial streets could be prioritized to provide better walking connections within communities.”

2.3.2 Bicycle Facilities

Within the study area, only Woodman Avenue has designated bicycle facilities, and is classified as a Tier 2 Bicycle Lane by the City of Los Angeles Mobility Plan 2035. Additionally, Van Nuys Boulevard and Sherman Way are identified as Tier 1 Protected Bicycle Lanes as part of the Bicycle Enhanced Network (BEN). BEN is a network of streets identified by the City of Los Angeles Mobility Plan 2035 that would be enhanced to prioritize bicyclists.

2.4 Traffic Volumes

Existing weekday peak hour turn movement counts at the study intersections were conducted in December 2018, during a typical non-holiday week while area schools were in-session. Peak hour turn volumes were adjusted using appropriate Passenger Car Equivalent (PCE) factors to account for number of heavy vehicles in the existing traffic stream. Raw traffic count worksheets and PCE adjusted worksheets are provided in Appendix B. This analysis focuses on the weekday daily, AM (7:00 a.m. to 10:00 a.m.) and the PM (3:00 p.m. to 6:00 p.m.) peak periods. The peak periods represent the highest volume of traffic for the adjacent street system. Existing weekday AM and PM peak hour volumes are summarized on Figure 5.



FIGURE 4
Existing Transit Facilities
LADWP - Mid Valley Water Facility

Source: LA Metro, 09/2018



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2.5 Intersection Operations

An intersection LOS analysis was prepared for the existing conditions using the CMA methodologies discussed in Section 1.4.2. Table 4 shows the results of the existing conditions LOS analysis. LOS worksheets are provided in Appendix C.

Table 4
Existing Weekday Peak Hour Intersection LOS

No.	Intersection	LOS Method	AM Peak		PM Peak	
			V/C ¹	LOS ²	V/C ¹	LOS ²
1	Van Nuys Boulevard/Saticoy Street	CMA	0.711	C	0.764	C
2	Van Nuys Boulevard/Valerio Street	CMA	0.562	A	0.614	B
3	Tyrone Avenue/Valerio Street	CMA	0.258	A	0.273	A
4	Hazeltine Avenue/Valerio Street	CMA	0.593	A	0.548	A
5	Woodman Avenue/Valerio Street	CMA	0.809	D	0.631	B
6	Van Nuys Boulevard/Sherman Way	CMA	0.660	B	0.763	C
7	Tyrone Avenue/Sherman Way	CMA	0.464	A	0.439	A
8	Hazeltine Avenue/Sherman Way	CMA	0.764	C	0.707	C
9	Woodman Avenue/Sherman Way	CMA	0.892	D	0.849	D

Source: Dudek, 2019

CMA = LADOT CMA Methodology

¹ Volume-to-Capacity (V/C) ratio

² Level of Service (LOS)

As shown in the table, all of the study area intersections are currently operating at LOS D or better under existing conditions, during both peak hours.

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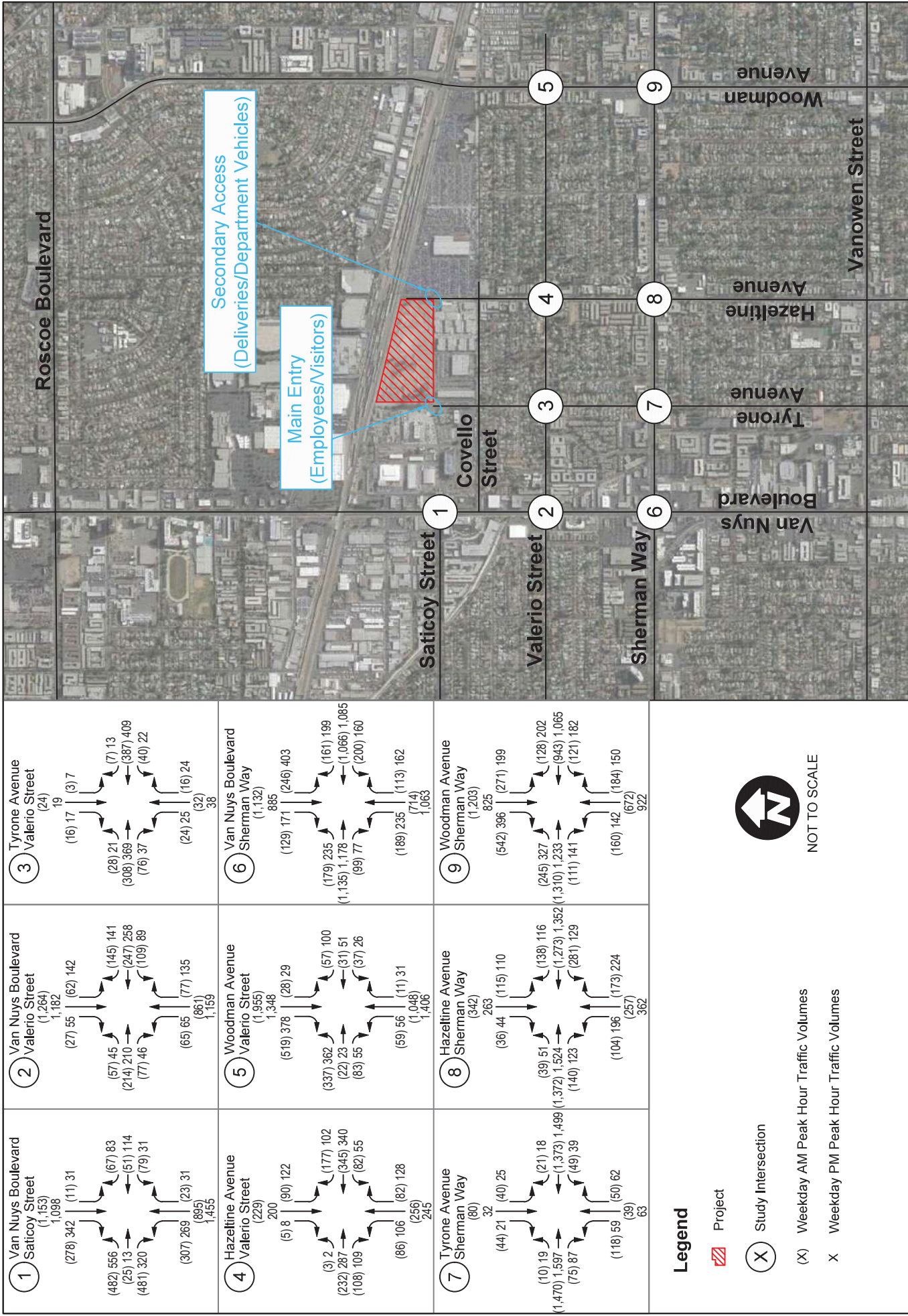


FIGURE 5
Existing Traffic Volumes
 LADWP - Mid Valley Water Facility

Source: Google Maps, 06/2018

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3 PROJECT TRAFFIC

This section documents the trip generation, distribution, and assignment of project traffic.

3.1 Trip Generation

Trip generation for the proposed project is based on the number of employees (a total of 416 staff estimated for the year 2022) that are proposed to occupy various components of the facility (shown in Table 1). Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition* (2017). Trip generation estimates for the project are based on the trip generation rate per employee for utility land use. A utility use is defined by ITE as a “free-standing building that can house office space, a storage area, and electromechanical or industrial equipment that support a local electrical, communication, water supply or control, or sewage treatment utility.”

Trip generation rates and resulting trip generation estimates for the project are summarized in Table 5.

**Table 5
Proposed Mid Valley Water Facility Trip Generation Summary**

ITE Trip Generation Rates								
<i>Land Use</i>	<i>Size/Unit</i>	<i>Daily</i>	<i>AM Peak Hour</i>			<i>PM Peak Hour</i>		
			<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Utility (ITE 170)	per employee	4.11	0.57	0.13	0.70	0.11	0.65	0.76
<i>Trip Generation</i>								
Mid Valley Water Facility	416 employees	1,710	236	55	291	47	269	316
<i>Transit Reduction (15% Daily/AM,PM)¹</i>		-256	-35	-8	-44	-7	-40	-47
<i>Off-Peak Employee Trip Reduction (15% AM/PM)²</i>		0	-30	-7	-37	-6	-34	-40
NET Trip Generation		1,453	170	40	210	34	194	229

Notes:

Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition, 2017*.

¹ 15% Transit Reduction assumed given the project's proximity to transit service including Van Nuys Amtrak/Metrolink station, Metro and LADOT Dash bus lines.

² 15% Off-Peak employee trip reduction as approximately 15% of all employees are anticipated to begin work before 7:00 am and leave work before 3:00 pm, and therefore commute outside of the AM and PM peak periods.

As shown in the Table 5, the project would generate 1,710 daily trips, 291 AM peak hour trips (236 inbound and 55 outbound), and 316 trips during the PM peak hour (47 inbound and 269 outbound).

However, after applying a transit reduction due to the project's proximity to transit service and an off-peak employee reduction to account for workers commuting outside the standard AM and PM peak hours, the project would generate approximately 1,453 net daily trips, 210 AM peak hour net trips (170 inbound and 40 outbound), and 229 net trips during the PM peak hour (34 inbound and 194 outbound).

3.2 Trip Distribution and Assignment

Project trip distribution percentages were based on logical travel paths to commute corridors in the study area as well as analysis of employee data provided by LADWP. City staff approved the project's trip distribution percentages prior to the initiation of the traffic analysis, and a copy of the approved MOU is provided in Appendix A.

As shown in Figure 6, approximately 45% of the traffic would access the project site from the north, 35% would access from the south, and 10% from the east, and 10% from the west of the project site.

A majority of project traffic would consist of employees and visitors. Therefore, 90% of project traffic was assumed to access the project site at the main entry proposed at Tyrone Avenue. The remaining 10% of project traffic would comprise of delivery and service vehicles and would utilize the secondary project access off Hazeltine Avenue. The delivery and department vehicle trips were mainly distributed onto the nearby freeway corridors (I-405 and SR-170).

Project trips were assigned to the study area intersections by applying the project trip generation estimates to the trip distribution percentages at each study area intersection. The resulting project trip assignment for project traffic is shown in Figure 7.

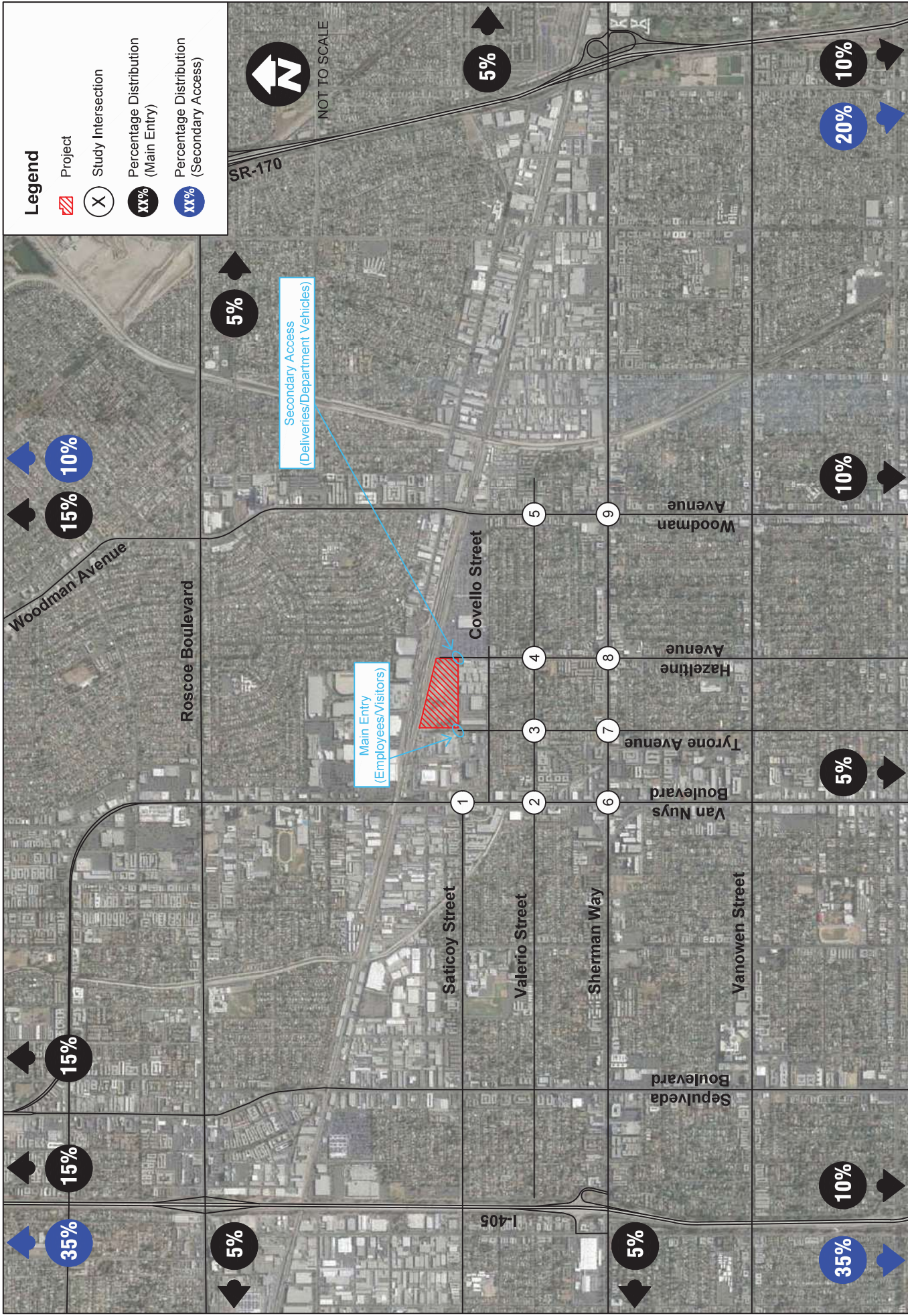


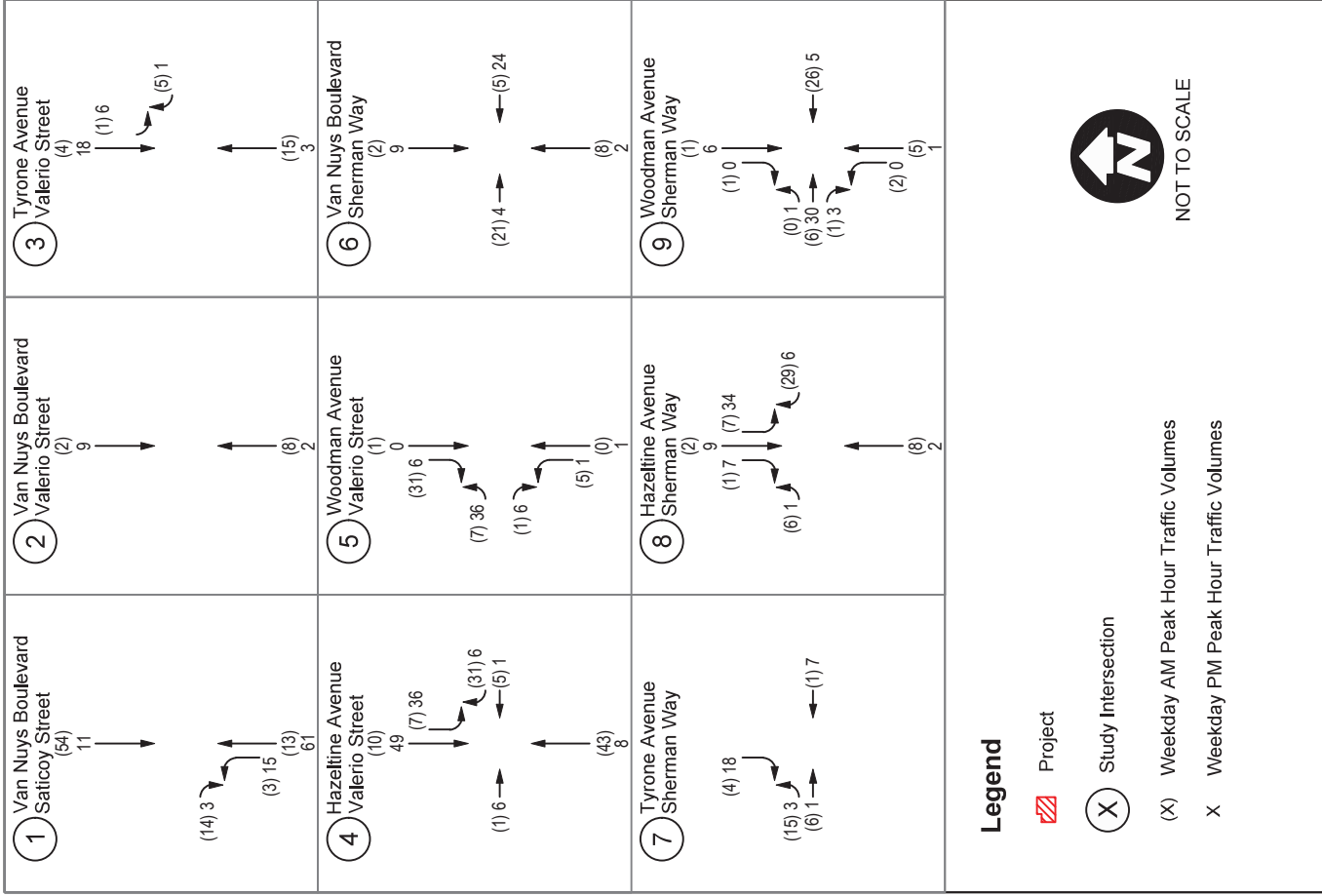
FIGURE 6
Project Trip Distribution
 LADWP - Mid Valley Water Facility

Source: Google Maps, 06/2018



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Source: Google Maps, 06/2018

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FIGURE 7
Project Trip Assignment
LADWP - Mid Valley Water Facility

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4 EXISTING PLUS PROJECT CONDITIONS

This section describes project-specific impacts under Existing plus Project conditions within the study area for intersection operations, and analyzes significance based on the LADOT significance criteria.

4.1 Traffic Volumes

Project traffic volumes shown in Figure 7 were added to the Existing traffic volumes shown in Figure 5 to derive the Existing plus Project traffic condition. Figure 8 shows the Existing plus Project traffic volumes.

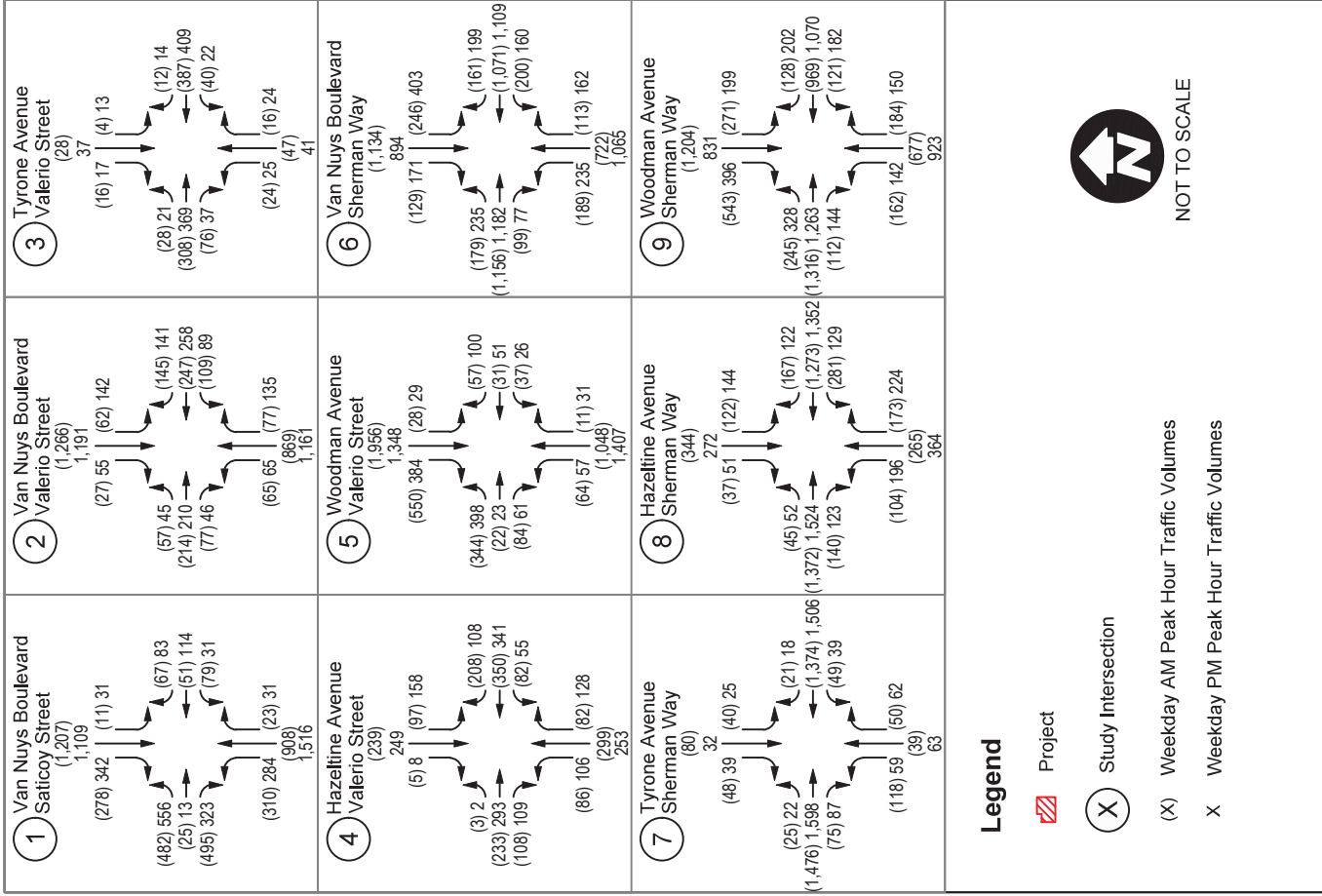
4.2 Intersection Operations

An intersection LOS analysis was prepared for the Existing plus Project condition using the CMA methodology. Table 6 summarizes the results of the Existing plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix C.

As shown in Table 6, all of the study area intersections are forecast to operate at LOS D or better, under Existing plus Project conditions. In addition, the V/C increases created by the proposed project would not create a significant impact per LADOT significance criteria shown in Table 2. Therefore, the project would not have a significant impact at any of the study area intersections under Existing plus Project conditions.

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- Legend**
- Project
 - Study Intersection
 - (X) Weekday AM Peak Hour Traffic Volumes
 - X Weekday PM Peak Hour Traffic Volumes



NOT TO SCALE

Source: Google Maps, 06/2018

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FIGURE 8
Existing plus Project Traffic Volumes
LADWP - Mid Valley Water Facility

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Table 6
Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	LOS Method	Existing				Existing plus Project				Change in V/C		Significant Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Van Nuys Boulevard/Saticoy Street	CMA	0.711	C	0.764	C	0.726	C	0.777	C	0.015	0.013	No	No
2	Van Nuys Boulevard/Valerio Street	CMA	0.562	A	0.614	B	0.563	A	0.614	B	0.001	0.000	No	No
3	Tyrone Avenue/Valerio Street	CMA	0.258	A	0.273	A	0.272	A	0.279	A	0.014	0.006	No	No
4	Hazeltine Avenue/Valerio Street	CMA	0.593	A	0.548	A	0.650	B	0.585	A	0.057	0.037	No	No
5	Woodman Avenue/Valerio Street	CMA	0.809	D	0.631	B	0.824	D	0.661	B	0.015	0.030	No	No
6	Van Nuys Boulevard/Sherman Way	CMA	0.660	B	0.763	C	0.666	B	0.770	C	0.006	0.007	No	No
7	Tyrone Avenue/Sherman Way	CMA	0.464	A	0.439	A	0.468	A	0.440	A	0.004	0.001	No	No
8	Hazeltine Avenue/Sherman Way	CMA	0.764	C	0.707	C	0.765	C	0.732	C	0.001	0.025	No	No
9	Woodman Avenue/Sherman Way	CMA	0.892	D	0.849	D	0.900	D	0.853	D	0.008	0.004	No	No

Source: Dudek 2019

Note: CMA = LADOT CMA Methodology; **BOLD** value indicates unsatisfactory LOS

¹ Volume-to-Capacity (V/C) ratio

² Level of Service (LOS)

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5 FUTURE 2023 CONDITIONS

This section presents the analysis of future traffic conditions that was conducted for the horizon year (2023) where the proposed project is fully occupied. The Future 2023 conditions are based on the addition of traffic from approved and pending projects in the study area, along with application of an ambient growth factor to the existing 2018 traffic volumes.

5.1 Cumulative Projects

The cumulative projects are projects that are proposed and in the review process, but not yet fully approved; or, projects that have been approved, but not fully constructed or occupied. Based on review of the Los Angeles Department of City Planning, Case Reports, thirteen cumulative development projects that may add traffic to the project study area were identified.

Figure 9 shows the locations, and Table 7 provides the trip generation of these cumulative projects. Brief descriptions of all cumulative projects are provided in the LADOT MOU in Appendix A.

5.1.1 Trip Generation

As described above, cumulative projects were identified from review of the Los Angeles Department of City Planning, Case Reports. Trip generation rates provided by the Institute of Engineers (ITE) *Trip Generation*, 10th Edition, were applied to all cumulative projects and total trip generation is shown in Table 7. As shown in the table, cumulative projects are forecast to generate approximately 7,273 daily trips, 403 AM peak hour trips, and 642 PM peak hour trips.

5.1.2 Trip Distribution and Assignment

Trip distributions and assignments for the cumulative projects were developed assuming logical commute corridors. The trips generated by the cumulative projects were distributed and assigned through the study area network.

5.2 Traffic Volumes

Future 2023 traffic volumes include traffic from ambient growth, and traffic from the addition of cumulative projects in the vicinity of the project. A growth rate of 0.54% per year, provided in the “General Traffic Volume Growth Factors” (from the respective Regional Statistical Area #12 – RSA) found in Exhibit D-1 of the Los Angeles County Congestion Management Program (CMP) (Metro 2010) was applied to the existing traffic volumes to account for the Future 2023 conditions. In addition, traffic from cumulative (approved/pending but not yet constructed) projects in the vicinity of the project was also added to the study area intersections. Figure 10 illustrates the Future 2023 (no project) traffic volumes for peak hour conditions.

Transportation Impact Study – Mid Valley Water Facility

**Table 7
Cumulative Projects Trip Generation Summary**

No.	Project	Size/Units	Daily Trips	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<i>Cumulative Projects Trip Generation</i>									
1	14700 W Sherman Way 91405	58 DU	548	11	32	43	36	21	57
2	8025 N Sepulveda Blvd 91402	67 DU	364	6	18	24	18	11	29
3	7040 N Sepulveda Blvd 91405	2 TSF	1,036	45	43	88	37	34	72
4	7855 N Haskell Ave 91406	148 TSF	224	9	6	15	12	13	25
5	13670 W Sherman Way 91405	15 TSF	1,614	30	27	57	76	76	152
6	14401 Valerio Street 91405	7 DU	66	1	4	5	4	3	7
7	14640 W Roscoe Blvd 91402	19 TSF	2,008	43	29	72	89	85	174
8	6705 N Sepulveda Blvd 91411	30 DU	283	6	17	22	19	11	30
9	7401 N Lankershim Blvd 91605 ¹	108 DU	588	10	29	39	29	19	48
10	8011 N Sepulveda Blvd 91402 ²	32 DU	174	3	9	12	9	5	14
11	15945 Sherman Way 91406	5 DU	47	1	3	4	3	2	5
12	14411 W Vanowen Street 91405	22 DU	161	2	8	10	8	5	12
13	14421 W Nordhoff Street 91402	17 DU	160	3	9	13	11	6	17
Total Cumulative Project Trip Generation				171	233	403	350	292	642

Notes: TSF = Thousand Square Feet, DU = Dwelling Units

Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

- ¹ Square footage not available for the commercial component of this project. Additionally, the Mid-Rise Residential with 1st-Floor Commercial trip rate (ITE Code 231) was not used due to small sample size.
- ² Description of project includes demolition of commercial building; however, no reductions were taken into consideration for the existing land use as aerial footage indicates demolition occurred before existing traffic counts were collected

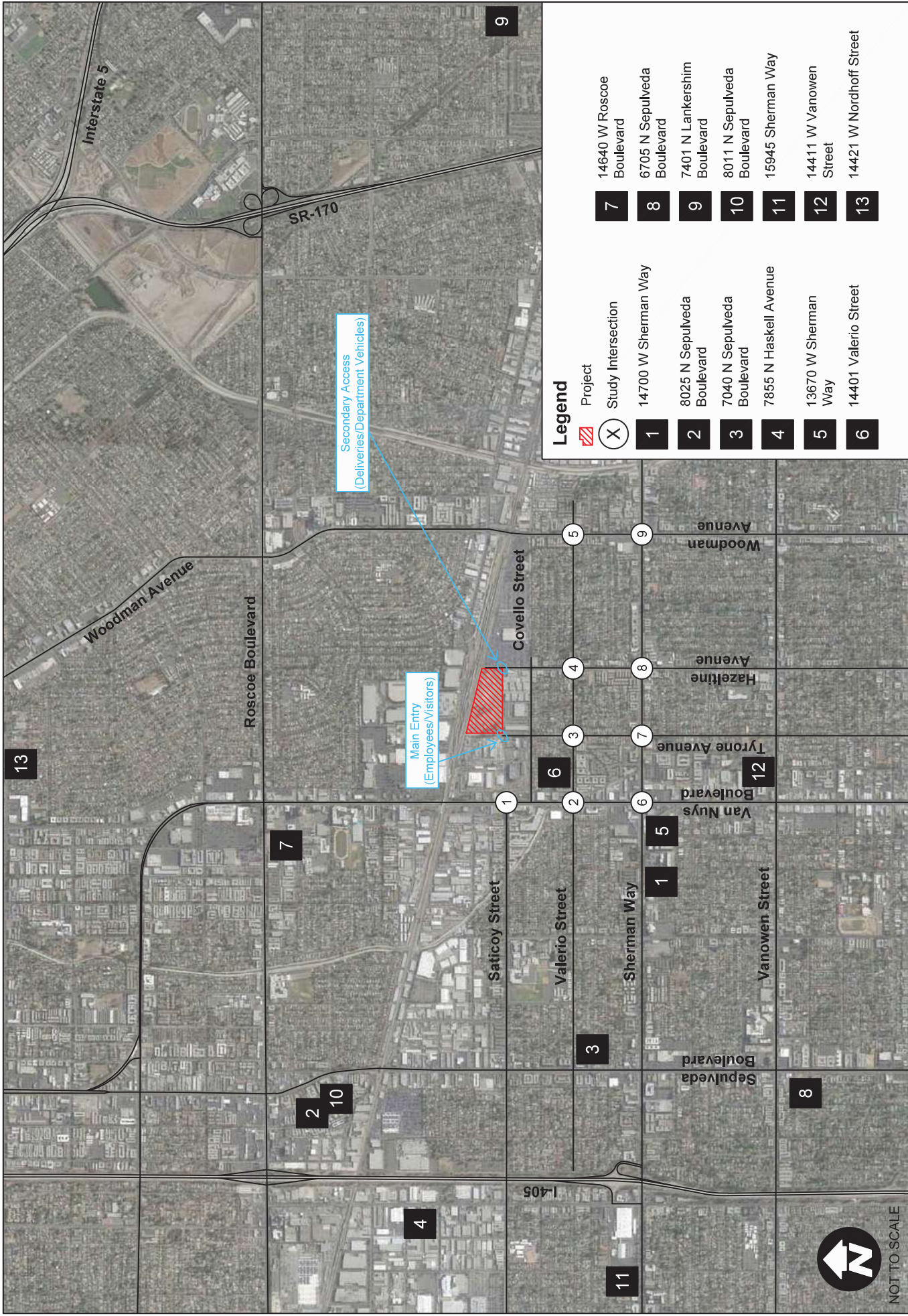


FIGURE 9
Locations of Cumulative Projects
 LADWP - Mid Valley Water Facility

Source: Google Earth, 06/2018

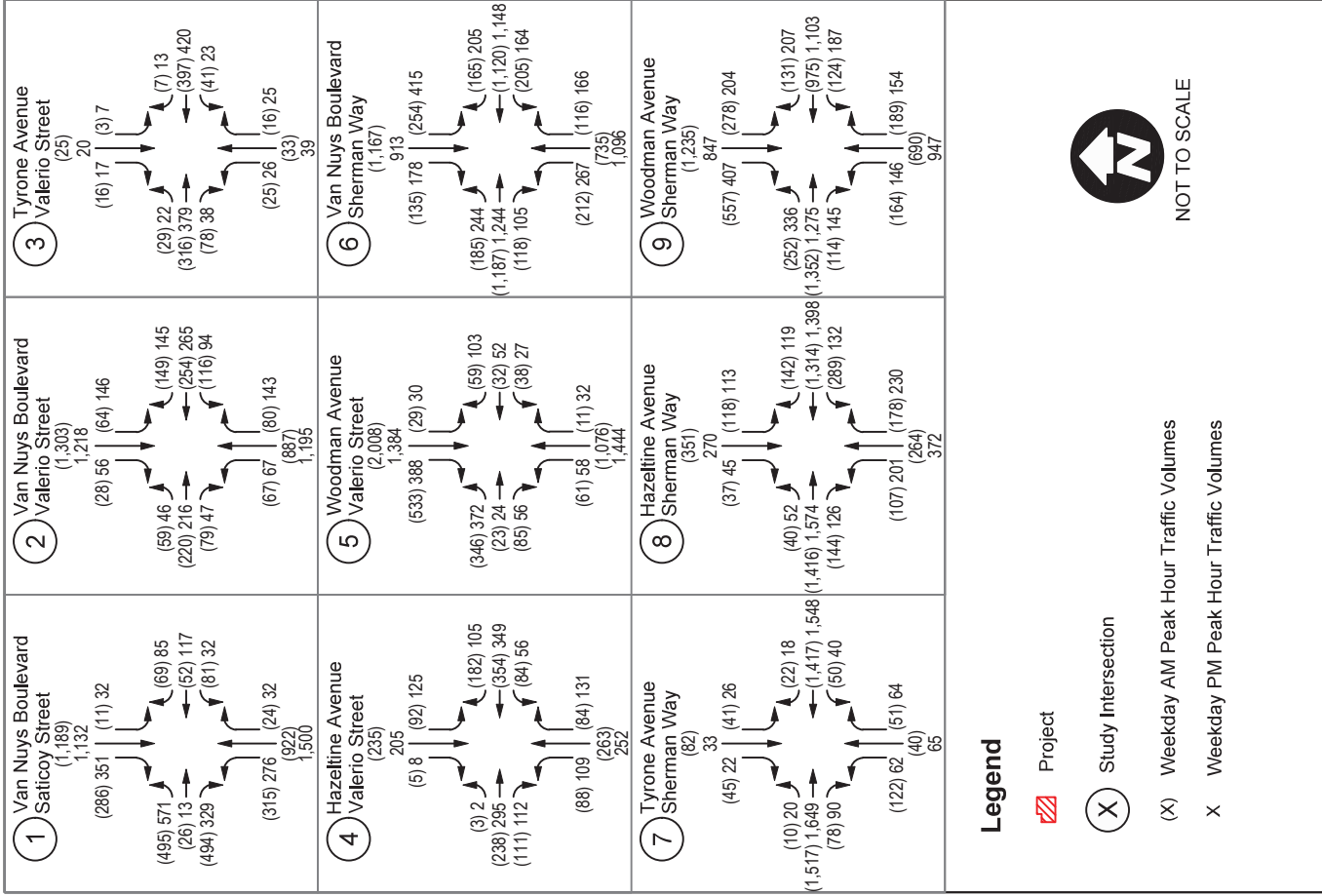


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Transportation Impact Study – Mid Valley Water Facility

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- Legend**
- Project
 - Study Intersection
 - (X) Weekday AM Peak Hour Traffic Volumes
 - X Weekday PM Peak Hour Traffic Volumes



NOT TO SCALE

Source: Google Maps, 06/2018

FIGURE 10
Future 2023 Traffic Volumes
LADWP - Mid Valley Water Facility



Transportation Impact Study – Mid Valley Water Facility

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Transportation Impact Study – Mid Valley Water Facility

5.3 Intersection Operations

An intersection LOS analysis was prepared for the Future 2023 baseline condition using the CMA methodology. Table 8 summarizes the results of the Future 2023 intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix C.

Table 8
Future 2023 Peak Hour Intersection Level of Service

No.	Intersection	LOS Method	AM Peak Hour		PM Peak Hour	
			<i>Delay</i> ¹	<i>LOS</i> ²	<i>Delay</i> ¹	<i>LOS</i> ²
1	Van Nuys Boulevard/Saticoy Street	CMA	0.734	C	0.787	C
2	Van Nuys Boulevard/Valerio Street	CMA	0.583	A	0.635	B
3	Tyrone Avenue/Valerio Street	CMA	0.268	A	0.283	A
4	Hazeltine Avenue/Valerio Street	CMA	0.611	B	0.566	A
5	Woodman Avenue/Valerio Street	CMA	0.833	D	0.653	B
6	Van Nuys Boulevard/Sherman Way	CMA	0.699	B	0.797	C
7	Tyrone Avenue/Sherman Way	CMA	0.481	A	0.458	A
8	Hazeltine Avenue/Sherman Way	CMA	0.789	C	0.732	C
9	Woodman Avenue/Sherman Way	CMA	0.920	E	0.877	D

Source: Dudek 2019

Note: CMA = LADOT CMA Methodology; BOLD value indicates unsatisfactory LOS

¹ Volume-to-Capacity (V/C) ratio

² Level of Service (LOS)

As shown in Table 8, all of the study area intersections, except the Woodman Avenue/Sherman Way intersection, are forecast to continue to operate at LOS D or better, under Future 2023 conditions during both peak hours. The Woodman Avenue/Sherman Way intersection operates at LOS E during the AM peak hour and at LOS D during the PM peak hour, under Future 2023 conditions.

Transportation Impact Study – Mid Valley Water Facility

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6 FUTURE 2023 PLUS PROJECT CONDITIONS

This section describes project impacts under Future 2023 plus Project conditions within the study area for intersection operations, and analyzes significance based on the LADOT significance criteria.

6.1 Traffic Volumes

The project trip assignment, as shown in Figure 7, was added to the Future 2023 traffic volumes, as shown in Figure 10, to derive the Future 2023 plus Project traffic volumes. Figure 11 shows the Future 2023 plus Project traffic volumes.

The existing intersection geometrics in the study area have been assumed to be maintained through the Future 2023 plus Project traffic scenario, as shown in Figure 3.

6.2 Intersection Operations

An intersection LOS analysis was prepared for the Future 2023 plus Project condition using the CMA methodology. Table 9 summarizes the results of the Future 2023 plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix C.

As shown in Table 9, with the exception of Woodman Avenue/Sherman Way, all of the study area intersections are forecast to operate at LOS D or better, under Future 2023 plus Project conditions. The Woodman Avenue/Sherman Way intersection continues to operate at LOS E during the AM peak hour. Since the V/C increase during the AM peak hour would be less than 0.01, the project would not have a significant impact at the Woodman Avenue/Sherman Way intersection.

Therefore, per LADOT significance criteria, the project would not have a significant impact at any of the study area intersections under Future 2023 plus Project conditions.

Transportation Impact Study – Mid Valley Water Facility

Table 9
Future 2023 plus Project Intersection Level of Service

No.	Intersection	LOS Method	Future 2023		Future 2023 plus Project		Change in V/C		Significant Impact	
			AM Peak Delay ¹	PM Peak Delay ¹	AM Peak Delay ¹	PM Peak Delay ¹	AM	PM	AM	PM
1	Van Nuys Boulevard/Saticoy Street	CMA	0.734	0.787	0.749	0.800	0.015	0.013	No	No
2	Van Nuys Boulevard/Valerio Street	CMA	0.583	0.635	0.583	0.636	0.000	0.001	No	No
3	Tyrone Avenue/Valerio Street	CMA	0.268	0.283	0.282	0.290	0.014	0.007	No	No
4	Hazeltine Avenue/Valerio Street	CMA	0.611	0.566	0.668	0.601	0.057	0.035	No	No
5	Woodman Avenue/Valerio Street	CMA	0.833	0.653	0.849	0.683	0.016	0.030	No	No
6	Van Nuys Boulevard/Sherman Way	CMA	0.699	0.797	0.705	0.803	0.006	0.006	No	No
7	Tyrone Avenue/Sherman Way	CMA	0.481	0.458	0.485	0.458	0.004	0.000	No	No
8	Hazeltine Avenue/Sherman Way	CMA	0.789	0.732	0.791	0.757	0.002	0.025	No	No
9	Woodman Avenue/Sherman Way	CMA	0.920	0.877	0.929	0.881	0.009	0.004	No	No

Source: Dudek 2019

Note: CMA = LADOT CMA Methodology; **BOLD** value indicates unsatisfactory LOS

¹ Volume-to-Capacity (V/C) ratio

² Level of Service (LOS)



<p>1 Van Nuys Boulevard Saticoy Street</p> <p>(286) 351 (11) 32 (69) 85 (52) 117 (81) 32 (24) 32 (935) 1,561</p> <p>(495) 571 (26) 13 (508) 332 (318) 291 (935) 1,561</p>	<p>2 Van Nuys Boulevard Valerio Street</p> <p>(28) 56 (64) 146 (149) 145 (254) 265 (116) 94 (67) 67 (80) 143 (695) 1,197</p> <p>(59) 46 (220) 216 (79) 47 (67) 67 (80) 143 (695) 1,197</p>	<p>3 Tyrone Avenue Valerio Street</p> <p>(16) 17 (4) 13 (29) 22 (12) 14 (316) 379 (397) 420 (78) 38 (41) 23 (25) 26 (16) 25 (48) 42</p>
<p>4 Hazeltine Avenue Valerio Street</p> <p>(5) 8 (99) 161 (213) 111 (359) 350 (84) 56 (88) 109 (84) 131 (306) 260</p> <p>(3) 2 (239) 301 (111) 112 (213) 111 (359) 350 (84) 56 (88) 109 (84) 131 (306) 260</p>	<p>5 Woodman Avenue Valerio Street</p> <p>(564) 394 (29) 30 (59) 103 (32) 52 (38) 27 (66) 59 (11) 32 (1,076) 1,445</p> <p>(353) 408 (23) 24 (86) 62 (66) 59 (11) 32 (1,076) 1,445</p>	<p>6 Van Nuys Boulevard Sherman Way</p> <p>(135) 178 (254) 415 (185) 244 (1,208) 1,248 (118) 105 (212) 267 (116) 166 (743) 1,098</p> <p>(135) 178 (254) 415 (185) 244 (1,208) 1,248 (118) 105 (212) 267 (116) 166 (743) 1,098</p>
<p>7 Tyrone Avenue Sherman Way</p> <p>(49) 40 (41) 26 (22) 18 (1,418) 1,555 (50) 40 (122) 62 (51) 64 (40) 65</p> <p>(25) 23 (1,523) 1,650 (78) 90 (122) 62 (51) 64 (40) 65</p>	<p>8 Hazeltine Avenue Sherman Way</p> <p>(38) 52 (125) 147 (171) 125 (1,314) 1,398 (289) 132 (107) 201 (178) 230 (272) 374</p> <p>(38) 52 (125) 147 (171) 125 (1,314) 1,398 (289) 132 (107) 201 (178) 230 (272) 374</p>	<p>9 Woodman Avenue Sherman Way</p> <p>(558) 407 (278) 204 (252) 337 (1,358) 1,305 (115) 148 (166) 146 (189) 154 (695) 948</p> <p>(558) 407 (278) 204 (252) 337 (1,358) 1,305 (115) 148 (166) 146 (189) 154 (695) 948</p>

Legend

- Project
- Study Intersection
- (X) Weekday AM Peak Hour Traffic Volumes
- X Weekday PM Peak Hour Traffic Volumes



NOT TO SCALE

Source: Google Maps, 06/2018

FIGURE 11
Future 2023 plus Project Traffic Volumes
LADWP - Mid Valley Water Facility



Transportation Impact Study – Mid Valley Water Facility

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7 CONGESTION MANAGEMENT PLAN ANALYSIS

This section provides analysis that is required for conformance with the County of Los Angeles Congestion Management Program. The County's CMP requires evaluation of CMP arterial monitoring intersections where the project adds 50 or more new peak hour trips and/or mainline freeway monitoring location where a project adds 150 trips or more, in either direction during either the weekday AM or PM peak hours. I-405 and SR-170 is the closest CMP facility in the study area.

The nearest CMP arterial monitoring intersection to the project is:

- #83 Victory Boulevard and Woodman Avenue

The nearest CMP mainline freeway monitoring locations to the project are:

- #1057 SR-170, south of Sherman Way
- #1072 I-405, north of Roscoe Boulevard

Based on the project's trip generation, distribution, assignment and freeway screening analysis, it would not add 50 or more new peak hour trips to the CMP arterial monitoring station, or 150 new peak hour trips to a CMP mainline freeway monitoring location. Project traffic would not likely increase the v/c ratio of any CMP facility by 0.02 v/c or higher. Therefore, CMP analysis would not be required.

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Transportation Impact Study – Mid Valley Water Facility

8 CMP TRANSIT ANALYSIS

As mentioned in Section 2.2, and shown in Figure 4, the project site has access to transit facilities such as Metro and LADOT DASH bus lines. As shown in Table 5, a transit reduction of 15% was applied to project trip generation per LADOT recommendation.

Vehicle and person trips estimates for CMP transit trips analysis for the project are summarized in Table 10. Vehicle trips were converted to person trips by applying a factor of 1.4, per CMP guidelines for Los Angeles.

**Table 10
Transit Trips**

CMP Transit Trips							
Land Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<i>Transit Reduction (15%)</i>							
Vehicle Trips (removed by Transit) ¹	256	35	8	44	7	40	47
<i>Person Trips</i>							
Person Trips (added to Transit) ²	359	50	12	61	10	56	66

Notes:

¹ Trip generation from Table 6 – Project Trip Generation.

² Per CMP guidelines, a conversion factor of 1.4 was utilized to convert vehicle trips to person trips.

As shown in the Table 10, the project would generate 359 net additional transit trips, 61 AM peak hour trips (50 inbound and 12 outbound), and 66 trips during the PM peak hour (10 inbound and 66 outbound).

The CMP transit performance is based on frequency and routing of public transit. Since the study area is served by both bus and rail transit that operate at adequate frequency and the highest peak hour directional transit trips is only 56 person trips, the project is not anticipated to create a significant impact on the transit system in the study area.

Transportation Impact Study – Mid Valley Water Facility

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9 FINDINGS

Based on the traffic analysis of the proposed Mid Valley Water Facility, the following findings on study area intersection levels of service, project trip generation, and project impacts are made:

- After applying a transit reduction due to the project's proximity to transit service and an off-peak employee reduction to account for workers commuting outside the standard AM and PM peak hours, the project would generate approximately 1,453 net daily trips, 210 AM peak hour net trips (170 inbound and 40 outbound), and 229 net trips during the PM peak hour (34 inbound and 194 outbound).
- In Existing plus Project conditions, all of the study area intersections are forecast to operate at LOS D, and the project's increases to intersection V/C would be less than the LADOT significance criteria. Therefore, the proposed project would not create a significant impact in the Existing plus Project condition.
- In Future 2023 plus Project conditions with the exception of Woodman Avenue/Sherman Way, all of the study area intersections are forecast to operate at LOS D or better, The Woodman Avenue/Sherman Way intersection continues to operate at LOS E during the AM peak hour. Since the V/C increase during the AM peak hour would be less than 0.01, the project would not have a significant impact at the Woodman Avenue/Sherman Way intersection. Therefore, the proposed project would not have a significant impact at any of the study area intersections under the Future 2023 plus Project conditions.
- Based on the project's trip generation, distribution, assignment and freeway screening analysis, it would not add 50 or more new peak hour trips to the CMP arterial monitoring station, or 150 new peak hour trips to a CMP mainline freeway monitoring location. Project traffic would not likely increase the v/c ratio of any CMP facility by 0.02 v/c or higher. Therefore, CMP analysis would not be required.
- The project would generate 359 net additional transit trips, 61 AM peak hour trips (50 inbound and 12 outbound), and 66 trips during the PM peak hour (10 inbound and 66 outbound). Since the study area is served by both bus and rail transit that operate at adequate frequency and the highest peak hour directional transit trips is only 56 person trips, the project is not anticipated to create a significant impact on the transit system in the study area.

Transportation Impact Study – Mid Valley Water Facility

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APPENDIX A

*LADOT Transportation Impact Study
Memorandum of Understanding (MOU)*



Transportation Impact Study Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Impact Study for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Impact Study Guidelines:

I. PROJECT INFORMATION

Project Name: LADWP Mid Valley Water Facility

Project Address: 7600 North Tyrone Avenue, Van Nuys, Los Angeles

Project Description: A consolidated campus with modern facilities and consolidated operations for the Mid Valley Water Facility on approximately 17.3-acre parcel comprising of 235,967 square feet of building, 216,000 square feet of parking and 180,168 square feet of yard/expansion space.

LADOT Project Case Number: _____ Project Site Plan attached? (Required) Yes No

II. TRIP GENERATION

Geographic Distribution: N 35.00 % S 45.00 % E 10.00 % W 10.00 %

Illustration of Project trip distribution percentages at Study intersections attached? (Required) Yes No

Trip Generation Adjustments (Exact amount of credit subject to approval by LADOT)

	Yes	No
Transit Usage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transportation Demand Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Existing Active Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Previous Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Internal Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pass-By Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Studied intersections
#3, #6, #7, #8, #9
#12, #13, #14 & #15

Source of Trip Generation Rate(s)? ITE 9th Edition Other: ITE 10th Edition

Trip generation table including a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? (Required) Yes No

	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>
AM Trips	<u>133</u>	<u>31</u>	<u>164</u>
PM Trips	<u>27</u>	<u>151</u>	<u>178</u>

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2023 Ambient or CMP Growth Rate: 0.54 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? (Required) Yes No

Subject to Freeway Impact Analysis, in addition to CMP Analysis? (Freeway analysis screening filter must be included in this MOU; selecting "yes" implies that at least one criteria was satisfied) Yes No

Map of Study Intersections attached? (May be subject to LADOT revision after initial impact analysis) Yes No

Is this Project located on a street within the High Injury Network? Yes No


IV. CONTACT INFORMATION

CONSULTANT

DEVELOPER




Name: Dennis Pascua, Dudek
Address: 605 Third Street, Encinitas, CA 92024
Phone Number: 760-479-4256
E-Mail: dpascua@dudek.com

Kathryn Laudeman, Environmental Planning and Assessment, LADWP
111 North Hope Street, Room 1044, Los Angeles, CA 90012
213-367-6376
Kathryn.Laudeman@ladwp.com

Approved by:	<u>x</u> 	<u>11-1-2018</u>	<u>x</u>		
	Consultant's Representative	Date	LADOT Representative	Date	

1. Van Nuys Boulevard/
Roscoe Boulevard
2. Woodman Avenue/
Roscoe Boulevard
3. Van Nuys Boulevard/
Saticoy Street
4. Tyrone Avenue/
Covello Street
5. Hazeltime Avenue/
Covello Street
6. Van Nuys Boulevard/
Valerio Street
7. Tyrone Avenue/
Valerio Street
8. Hazeltime Avenue/
Valerio Street
9. Woodman Avenue/
Valerio Street
10. Haskell Avenue/ I-405
SB ramps
11. I-405 NB - Firmament
Ave/ Sherman Way
12. Van Nuys Boulevard/
Sherman Way
13. Tyrone Avenue/
Sherman Way
14. Hazeltime Avenue/
Sherman Way
15. Woodman Avenue/
Sherman Way

Legend

-  Project
-  Study Intersection
-  Percentage Distribution

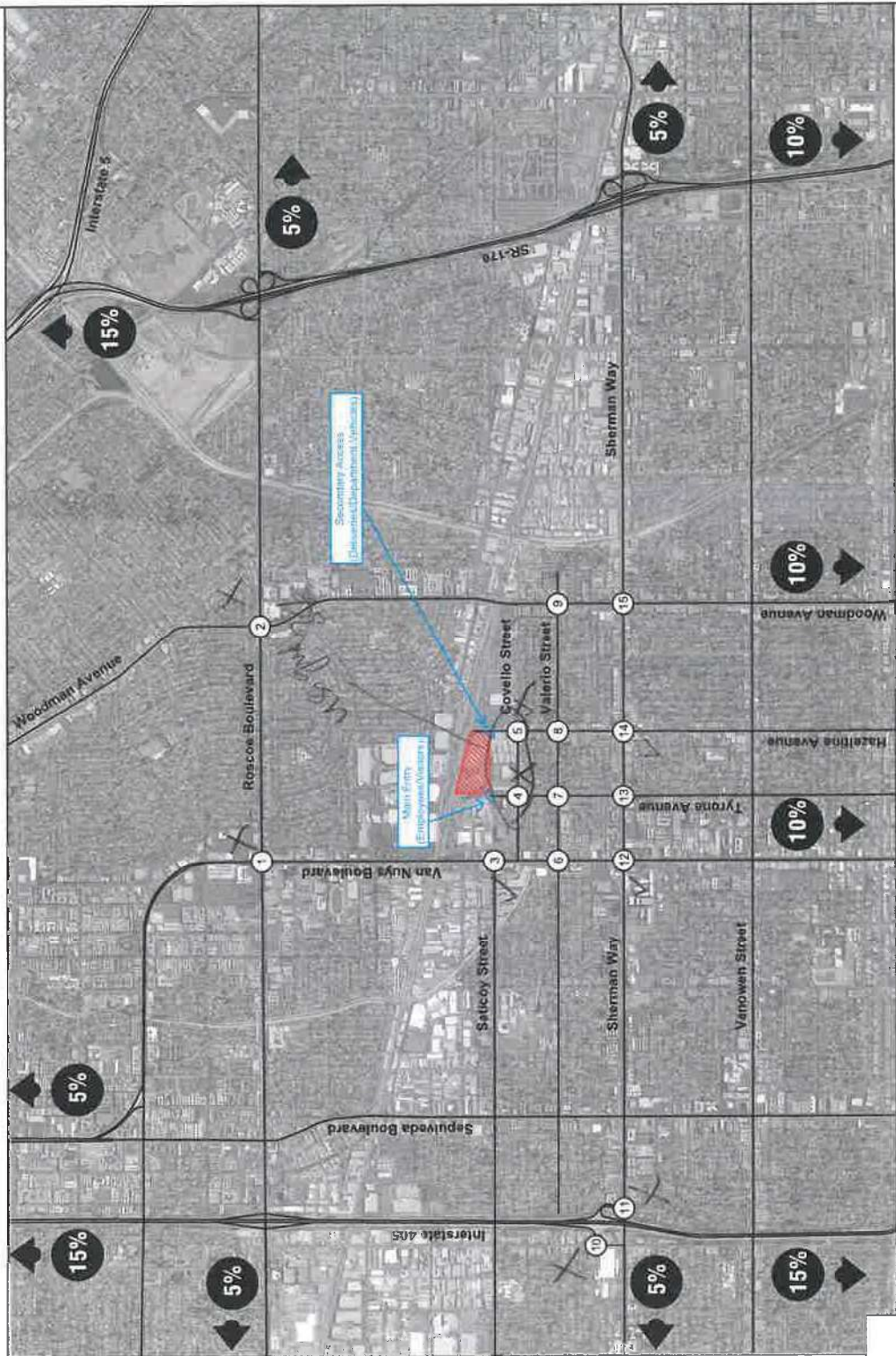


FIGURE 1
Study Area Intersections and Project Trip Distribution
LADWP - Mid Valley Water Facility

Plz do not include unsignalized there & intersections #1, #2, #4, #5 #10, #11

35%

Source: Google Maps, 09/2018



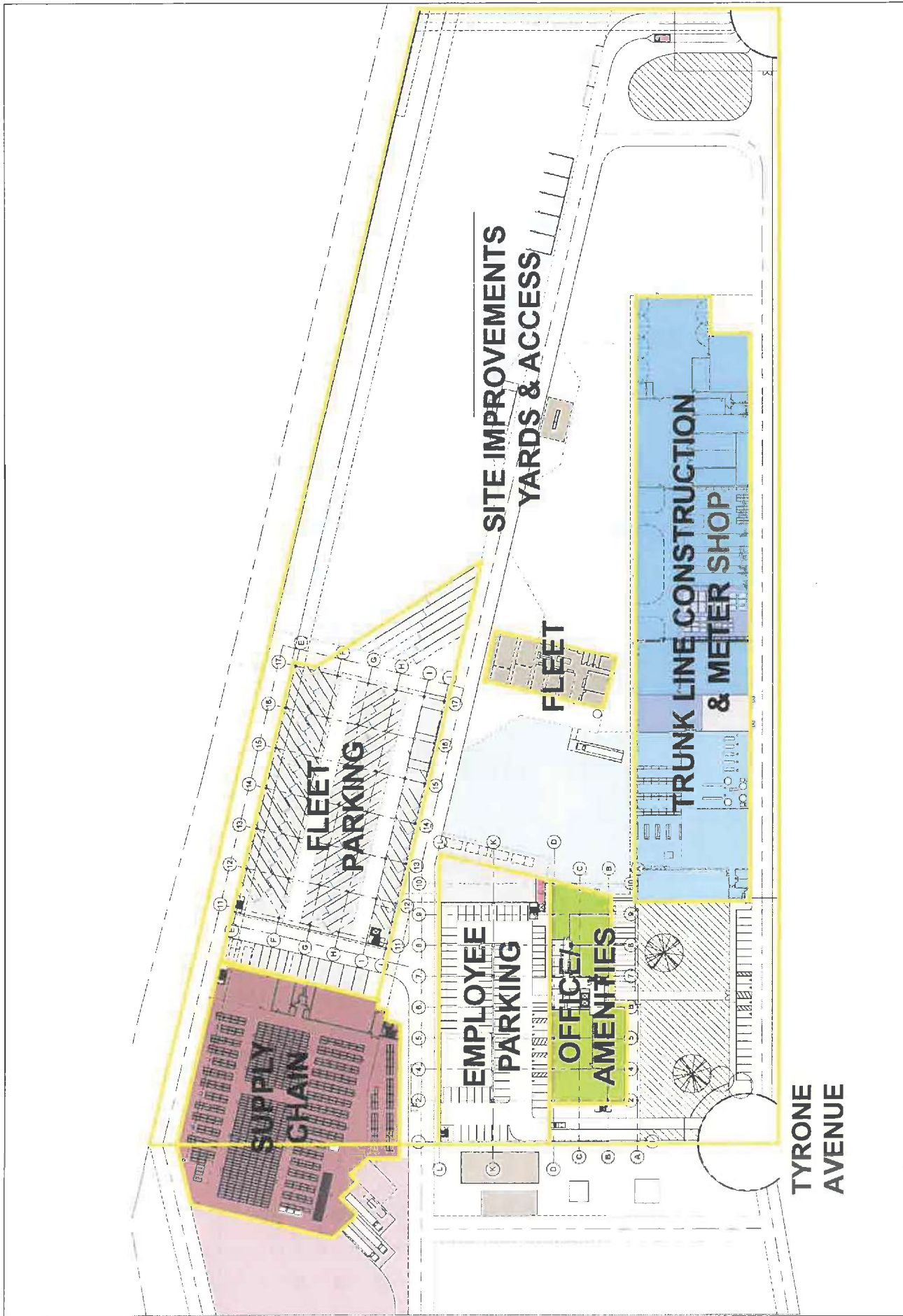


FIGURE 2
Preliminary Site Plan
 LADWP - Mid Valley Water Facility

**Table 1
Proposed Mid Valley Water Facility Trip Generation Summary**

Trip Rates								
Land Use	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Utility (ITE 170)	per employee	4.11	0.57	0.13	0.70	0.11	0.65	0.76
Trip Generation								
Utility (ITE 170)	416 employee	1,710	236	55	291	47	269	316
Transit Reduction (25% Daily/AM,PM) ¹		-427	-59	-14	-73	-12	-67	-79
Peak Employee Trip Reduction (25% AM/PM) ²		0	-44	-10	-55	-9	-50	-59
NET Trip Generation		1,282	133	31	164	27	151	178

max. 15%

Notes:

Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017.

¹ 25% Transit Reduction assumed given the project's proximity to transit service including Van Nuys Amtrak/MetroIn station, Metro and LADOT Dash buslines

² 25% Off-Peak employee trip reduction as approximately 25% of all employees are anticipated to begin work before 7:00 am and leave work before 3:00 pm, and therefore commute outside of the AM and PM peak periods.

Transit reduction = 15%

Table 2
Project Trip Assignment

	Daily	AM Peak Hour			PM Peak Hour		
		<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
% Project Trips	1,282	133	31	164	27	151	178
5%	64	7	2	8	1	8	9
10%	128	13	3	16	3	15	18
15%	192	20	5	25	4	23	27
20%	256	27	6	33	5	30	36

Freeway Impact Screening Analysis - Mid Valley Water Facility Project

PEAK HOUR PROJECT TRIP GENERATION	Utility	
	AM	PM
INBOUND	133	27
OUTBOUND	31	151

Facility	Capacity (vphpl)
Mainline Segment	2000
Off-ramp	850

FREEWAY LOCATION	DIRECTION	DIRECTION OF PROJECT TRIPS	Mid Valley Water Facility		NUMBER OF LANES	TOTAL CAPACITY	PERCENT OF CAPACITY		FREEWAY ANALYSIS REQUIRED? (YES/NO)	
			DIST. %	TRIPS			AM	PM		
				AM						PM
MAINLINE SEGMENT										
I-405 Freeway north of Roscoe Boulevard	Southbound	Inbound	15%	20	4	8,000	0.25%	0.05%	No	
	Northbound	Outbound	15%	4	23	8,000	0.05%	0.29%	No	
I-405 Freeway south of Sherman Way	Northbound	Inbound	15%	20	4	8,000	0.25%	0.05%	No	
	Southbound	Outbound	15%	4	23	8,000	0.05%	0.29%	No	
SR-170 Freeway north of Roscoe Boulevard	Southbound	Inbound	15%	20	4	6,000	0.33%	0.07%	No	
	Northbound	Outbound	15%	4	23	6,000	0.07%	0.38%	No	
SR-170 Freeway south of Sherman Way	Northbound	Inbound	10%	13	3	8,000	0.16%	0.04%	No	
	Southbound	Outbound	10%	3	15	8,000	0.04%	0.19%	No	
OFF-RAMP										
I-405 Southbound Ramp/ Roscoe Boulevard	Southbound	Inbound	15%	20	4	2,550	0.78%	0.16%	No	
I-405 Southbound Ramp/ Hiaskell Avenue	Southbound	Inbound	15%	20	4	1,700	1.18%	0.24%	Yes	
I-405 Northbound Ramp/ Roscoe Boulevard	Northbound	Inbound	15%	20	4	3,400	0.59%	0.12%	No	
I-405 Northbound Ramp/ Sherman Way	Northbound	Inbound	15%	20	4	1,700	1.18%	0.24%	Yes	
SR-170 Southbound Ramp/ Sherman Way	Southbound	Inbound	10%	13	3	2,550	0.51%	0.12%	No	
SR-170 Southbound Ramp/ Roscoe Boulevard	Southbound	Inbound	15%	20	4	2,550	0.78%	0.16%	No	

Freeway impact analysis is required if the project would result in an increase of $\geq 2\%$ of capacity for facilities operating at LOS D, or in an increase of $\geq 1\%$ of capacity for facilities operating at LOS E/F.

For a more conservative screening analysis, all facilities are assumed to be operating at LOS E or F.

**Table 4
Cumulative Projects Near Study Area***

Address	Filing Date	Case Number	CNC	CD#	Project Description	Request Type	Applicant Contact
14700 W SHERMAN WAY 91405	9/25/2015	CPC-2015-3534-GPA-ZC-BL-F-SPR	Van Nuys	6	NEW 58-UNIT SMALL-LOT SUBDIVISION, 1 COMMON AREA OPEN SPACE LOT, AND 5 PRIVATE COMMON ACCESS LOTS IN THE PROPOSED RD2 ZONE; ONE EXISTING SFD LOT IN THE R1 ZONE		ANGIE YEE
8025 N SEPULVEDA BLVD 91402	11/20/2017	DIR-2017-4855-SPR	North Hills East	6	PROPOSED NEW 4 STORIES RESIDENTIAL BUILDING 67 UNITS WITH FIRST FLOOR AND SUBTERRANEAN PARKING GARAGE.	SPR-SITE PLAN REVIEW	VAROOSH ABEDI (818)758-0018
7040 N SEPULVEDA BLVD 91405	11/21/2017	ZA-2017-4879-CU	Van Nuys	6	A 2,200 SF. RESTAURANT WITH DRIVE-THROUGH SERVICES AND OUTDOOR SEATING; ALLOWING THE HOURS OF OPERATION FROM 4:00A.M.TO 12A.M.(MIDNIGHT), 7 DAYS A WEEK.	CU-CONDITIONAL USE	KATIE ROUNDS; KAIDENCE GROUP (480)269-1235
7855 N HASKELL AVE 91406	11/28/2017	ENV-2017-4931-EAF	Lake Balboa	6	DEMOLITION OF AN EXISTING 114,052 SF. BUILDING AND SURFACE PARKING LOT AND NEW CONSTRUCTION OF AN APPROXIMATELY 148,182 SF. BUILDING FOR STORAGE OF HOUSEHOLD GOODS.	EAF-ENVIRONMENTAL ASSESSMENT	DAVE RAND/ALIX WISNER - ARMBRUSTER GOLDSMITH & DELVAC LLP (310)209-8800
13670 W SHERMAN WAY 91405	1/2/2018	ZA-2018-6-CU-CUB-ZBA-SPR	Greater Valley Glen	2	CONSTRUCTION OF A NEW 14,786 SQUARE FOOT CVS PHARMACY WITH MEZZANINE AND DRIVE-THROUGH PHARMACY WINDOW.	CU-CONDITIONAL USE	MARGARET TAYLOR (818)398-2740
14401 VALERIO ST 91405	1/29/2018	TT-72487-EXT	Van Nuys	2	SUBDIVISION OF A 21,719 SQUARE-FOOT LOT INTO SEVEN SINGLE FAMILY RESIDENCES		0-
14640 W ROSCOE BLVD 91402	2/5/2018	ZA-2018-664-CUB	Panorama City	6	A CONDITIONAL USE PERMIT (CUB) TO AUTHORIZE THE SALE OF BEER AND WINE FOR OFF-SITE CONSUMPTION IN CONJUNCTION WITH A (N) PROPOSED 18,802 SQ. FT. GROCERY STORE.	CUB-CONDITIONAL USE BEVERAGE-ALCOHOL	DOUG COUPER (714)292-1056
6705 N SEPULVEDA BLVD	2/26/2018	ENV-2018-1046-EAF	Van Nuys	6	SMALL LOT SUBDIVISION OF 30 DETACHED SINGLE FAMILY DWELLING WITH ATTACHED 2 CAR	EAF-ENVIRONMENTAL	ARMIN GHARAI (818)758-0018
7401 N LANKERSHIM BLVD 91605	3/16/2018	ENV-2018-1501-EAF	North Hollywood Northeast	2	DEMOLITION AND CONSTRUCTION OF 108 UNITS (98 MARKET RATE, 1 MANAGERS UNIT, 9 EXTREMELY LOW INCOME), 5 STORIES MIX-USE COMMERCIAL/RESIDENTIAL BUILDING OVER BASEMENT PARKING.TOC TIER 1: TWO INCENTIVES	EAF-ENVIRONMENTAL ASSESSMENT	ARMIN GHARAI (818)634-6327
8011 N SEPULVEDA BLVD 91402	3/21/2018	AA-2018-1599-COC	North Hills East	6	DEMOLITION OF EXISTING COMMERCIAL BUILDING 4,092 SF AND CONSTRUCTION OF A NEW 5 STORY 32 UNIT RESIDENTIAL BUILDING.	COC-CERTIFICATE OF COMPLIANCE	TANYA SANET (818)568-8132
15945 SHERMAN WAY 91406	4/24/2018	TT-72578-EXT	Lake Balboa	6	5-LOT SUBDIVISION		0-
14411 W VANOWEN ST 91405	6/5/2018	ZA-2018-3223-ZV-ZAA	Van Nuys	6	CONVERSION OF A VACANT OFFICE BUILDING INTO A 22-UNIT APARTMENT WITH INCREASED FLOOR AREA AND NO CLEARANCE AROUND SAID	ZV-ZONE VARIANCE	ROBERT B. LAMISHAW, JPL ZONING SERVICES (818)435-2010
14421 W NORDHOFF ST 91402	8/24/2018	APCNV-2008-513-ZC-BL-EXT	Panorama City	7	PROPOSED 17 SMALL LOT SUBDIVISION.	ZC-ZONE CHANGE	0-

* All project data is gathered from the City of Los Angeles Planning Department Website Case Reports.



Transportation Impact Study Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Impact Study for the following Project will be prepared in accordance with the latest version of LADOT’s Transportation Impact Study Guidelines:

I. PROJECT INFORMATION

Project Name: LADWP Mid Valley Water Facility

Project Address: 7600 North Tyrone Avenue, Van Nuys, Los Angeles

Project Description: A consolidated campus with modern facilities and consolidated operations for the Mid Valley Water Facility on approximately 17.3-acre parcel comprising of 235,967 square feet of building, 216,000 square feet of parking and 180,168 square feet of yard/expansion space.

LADOT Project Case Number: _____ Project Site Plan attached? (Required) Yes No

II. TRIP GENERATION

Geographic Distribution: N 45.00 % S 35.00 % E 10.00 % W 10.00 %

Illustration of Project trip distribution percentages at Study intersections attached? (Required) Yes No

Trip Generation Adjustments (Exact amount of credit subject to approval by LADOT)

	Yes	No
Transit Usage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transportation Demand Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Existing Active Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Previous Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Internal Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pass-By Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source of Trip Generation Rate(s)? ITE 9th Edition Other: ITE 10th Edition

Trip generation table including a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? (Required) Yes No

	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>
AM Trips	<u>170</u>	<u>40</u>	<u>210</u>
PM Trips	<u>34</u>	<u>194</u>	<u>229</u>

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2023 Ambient or CMP Growth Rate: 0.54 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? (Required) Yes No

Subject to Freeway Impact Analysis, in addition to CMP Analysis? (Freeway analysis screening filter must be included in this MOU; selecting “yes” implies that at least one criteria was satisfied) Yes No

Map of Study Intersections attached? (May be subject to LADOT revision after initial impact analysis) Yes No

Is this Project located on a street within the High Injury Network? Yes No

IV. CONTACT INFORMATION

CONSULTANT

Name: Dennis Pascua, Dudek
Address: 605 Third Street, Encinitas, CA 92024
Phone Number: 760-479-4256
E-Mail: dpascua@dudek.com




DEVELOPER

Kathryn Laudeman, Environmental Planning and Assessment, LADWP
111 North Hope Street, Room 1044, Los Angeles, CA 90012
213-367-6376
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Approved by: <u>x</u>	<u>12/5/2018</u>	<u>x</u>	
Consultant's Representative	Date	LADOT Representative	Date

1. Van Nuys Boulevard/
Saticoy Street
2. Van Nuys Boulevard/
Valerio Street
3. Tyrone Avenue/
Valerio Street
4. Hazeltine Avenue/
Valerio Street
5. Woodman Avenue/
Valerio Street
6. Van Nuys Boulevard/
Sherman Way
7. Tyrone Avenue/
Sherman Way
8. Hazeltine Avenue/
Sherman Way
9. Woodman Avenue/
Sherman Way

Legend

-  Project
-  Study Intersection
-  Percentage Distribution

Source: Google Maps, 06/2018

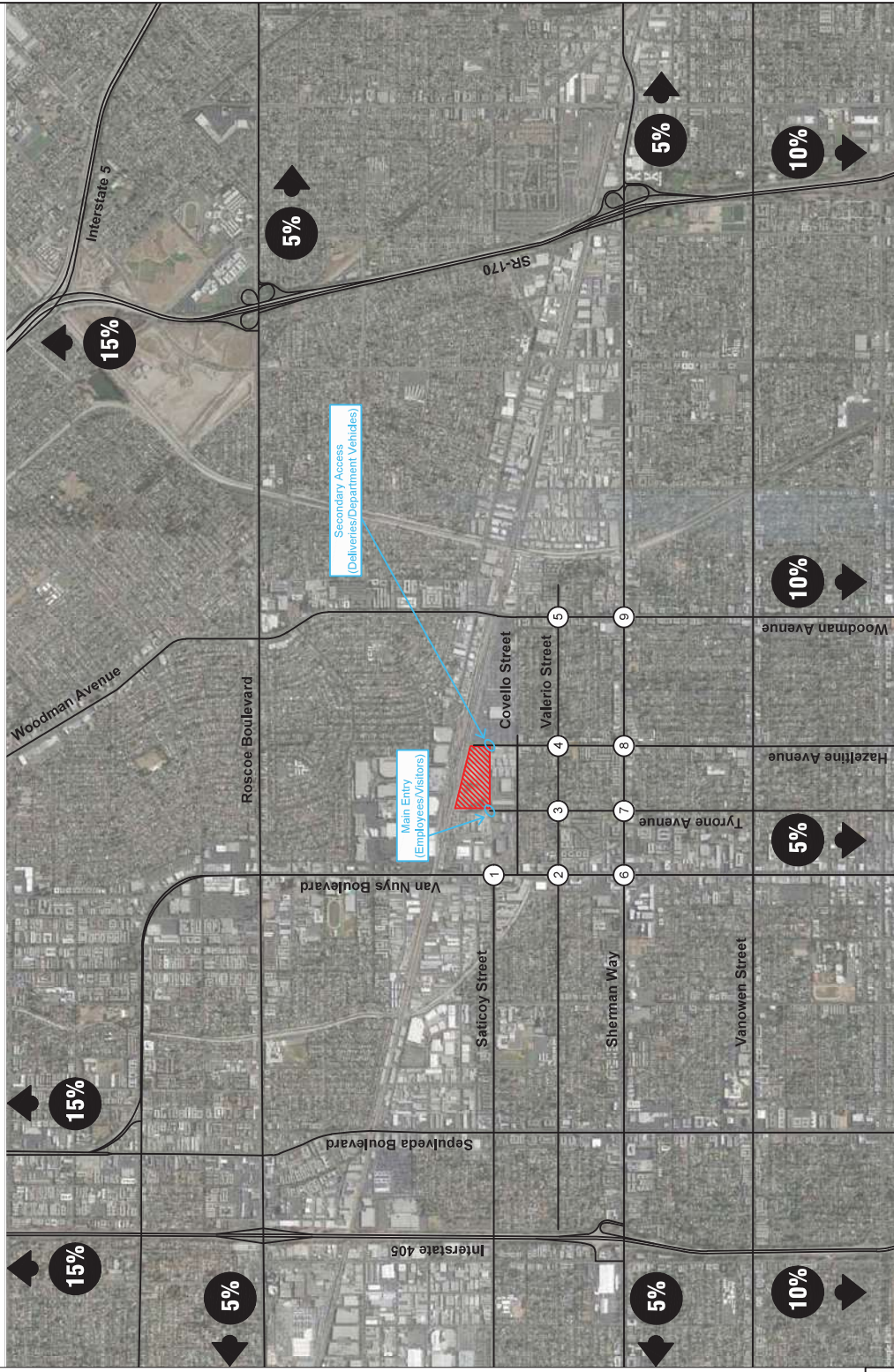


FIGURE 1
Study Area Intersections and Project Trip Distribution
 LADWP - Mid Valley Water Facility

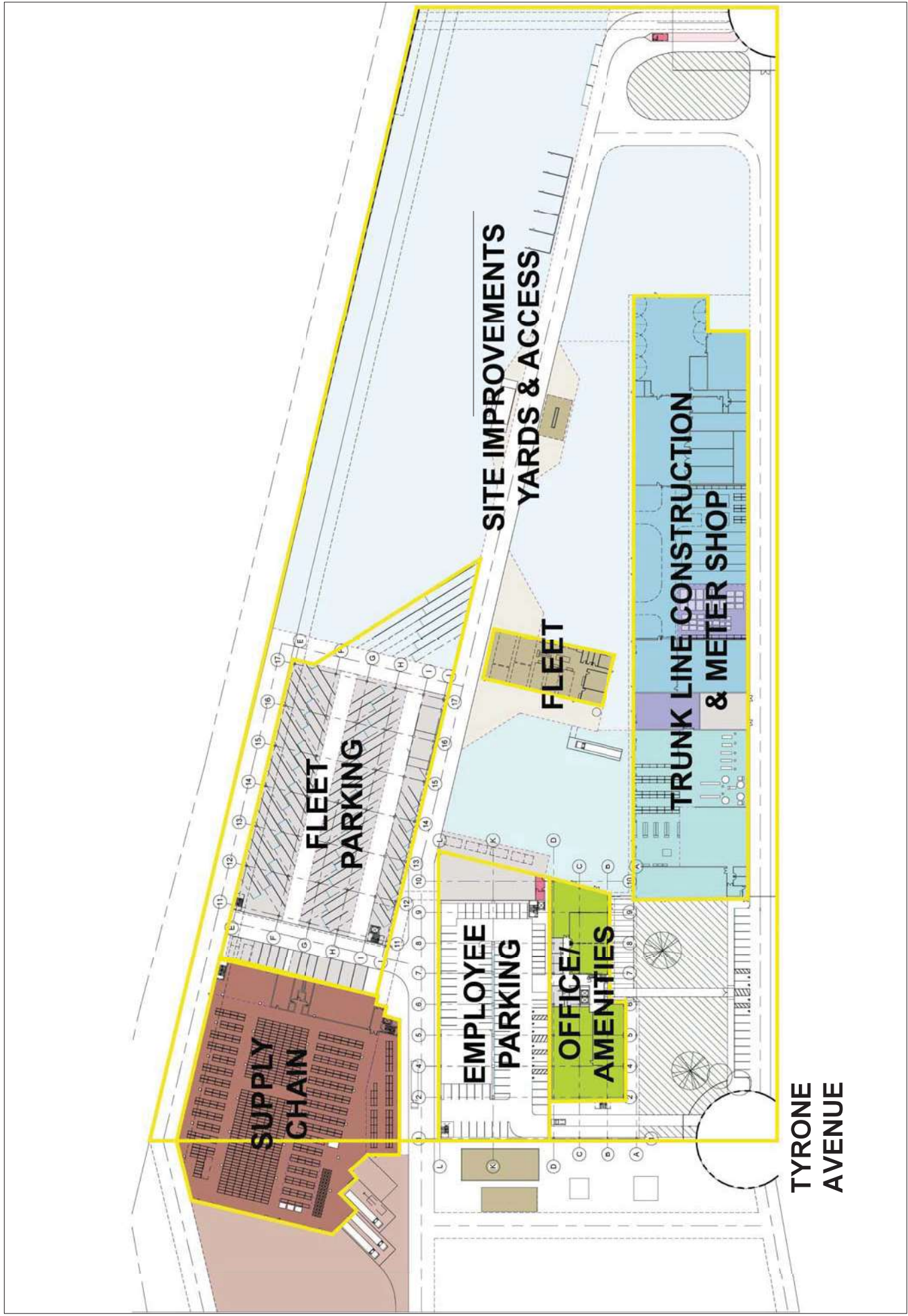


FIGURE 2
Preliminary Site Plan
LADWP - Mid Valley Water Facility

Table 1
Proposed Mid Valley Water Facility Trip Generation Summary

<i>Trip Rates</i>								
Land Use	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
			<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Utility (ITE 170)	per employee	4.11	0.57	0.13	0.70	0.11	0.65	0.76
<i>Trip Generation</i>								
Utility (ITE 170)	416 employee	1,710	236	55	291	47	269	316
<i>Transit Reduction (15% Daily/AM,PM)</i> ¹		-256	-35	-8	-44	-7	-40	-47
<i>Peak Employee Trip Reduction (15% AM/PM)</i> ²		0	-30	-7	-37	-6	-34	-40
NET Trip Generation		1,453	170	40	210	34	194	229

Notes:

Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017.

¹ 15% Transit Reduction assumed given the project's proximity to transit service including Van Nuys Amtrak/Metrolin station, Metro and LADOT Dash buslines

² 15% Off-Peak employee trip reduction as approximately 15% of all employees are anticipated to begin work before 7:00 am and leave work before 3:00 pm, and therefore commute outside of the AM and PM peak periods.

A utility is a free-standing building that can house office space, a storage area, and electromechanical or industrial equipment

Table 2
Project Trip Assignment

% Project Trips	Daily	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
	1453	170	40	210	34	194	229
5%	73	9	2	11	2	10	11
10%	145	17	4	21	3	19	23
15%	218	26	6	32	5	29	34
20%	291	34	8	42	7	39	46

Freeway Impact Screening Analysis - Mid Valley Water Facility Project

PEAK HOUR PROJECT TRIP GENERATION	Utility	
	AM	PM
INBOUND	170	34
OUTBOUND	40	194

Facility	Capacity (vohpl)
Mainline Segment	2000
Off-ramp	850

FREEWAY LOCATION	DIRECTION	DIRECTION OF PROJECT TRIPS	Mid Valley Water Facility				NUMBER OF LANES	TOTAL CAPACITY	PERCENT OF CAPACITY		FREEWAY ANALYSIS REQUIRED? (YES/NO)	
			DIST. %	TRIPS		AM			PM	AM		PM
				MAINLINE SEGMENT								
I-405 Freeway north of Roscoe Boulevard	Southbound	Inbound	15%	26	5	4	8,000	0.33%	0.06%	No		
	Northbound	Outbound	15%	5	29	4	8,000	0.06%	0.36%	No		
I-405 Freeway south of Sherman Way	Northbound	Inbound	15%	26	5	4	8,000	0.33%	0.06%	No		
	Southbound	Outbound	15%	5	29	4	8,000	0.06%	0.36%	No		
SR-170 Freeway north of Roscoe Boulevard	Southbound	Inbound	15%	26	5	3	6,000	0.43%	0.08%	No		
	Northbound	Outbound	15%	5	29	3	6,000	0.08%	0.48%	No		
SR-170 Freeway south of Sherman Way	Northbound	Inbound	10%	17	3	4	8,000	0.21%	0.04%	No		
	Southbound	Outbound	10%	3	19	4	8,000	0.04%	0.24%	No		
OFF-RAMP												
I-405 Southbound Ramp/ Roscoe Boulevard	Southbound	Inbound	15%	26	5	3	2,550	1.02%	0.20%	No		
I-405 Southbound Ramp/ Haskell Avenue	Southbound	Inbound	15%	26	5	2	1,700	1.53%	0.29%	Yes		
I-405 Northbound Ramp/ Roscoe Boulevard	Northbound	Inbound	15%	26	5	4	3,400	0.76%	0.15%	No		
I-405 Northbound Ramp/ Sherman Way	Northbound	Inbound	15%	26	5	2	1,700	1.53%	0.29%	Yes		
SR-170 Southbound Ramp/ Sherman Way	Southbound	Inbound	10%	17	3	3	2,550	0.67%	0.12%	No		
SR-170 Southbound Ramp/ Roscoe Boulevard	Southbound	Inbound	15%	26	5	3	2,550	1.02%	0.20%	No		

Freeway impact analysis is required if the project would result in an increase of ≥2% of capacity for facilities operating at LOS D, or in an increase of ≥1% of capacity for facilities operating at LOS E/F.

For a more conservative screening analysis, all facilities are assumed to be operating at LOS E or F.

**Table 4
Cumulative Projects Near Study Area***

Address	Filing Date	Case Number	CNC	CD#	Project Description	Request Type	Applicant Contact
14700 W SHERMAN WAY 91405	9/25/2015	CPC-2015-3534-GPA-ZC-BL-F-SPR	Van Nuys	6	NEW 58-UNIT SMALL-LOT SUBDIVISION, 1 COMMON AREA OPEN SPACE LOT, AND 5 PRIVATE COMMON ACCESS LOTS IN THE PROPOSED RD2 ZONE; ONE EXISTING SFD LOT IN THE R1 ZONE		ANGIE YEE
8025 N SEPULVEDA BLVD 91402	11/20/2017	DIR-2017-4855-SPR	North Hills East	6	PROPOSED NEW 4 STORIES RESIDENTIAL BUILDING 67 UNITS WITH FIRST FLOOR AND SUBTERRANEAN PARKING GARAGE.	SPR-SITE PLAN REVIEW	VAROOSH ABEDI (818)758-0018
7040 N SEPULVEDA BLVD 91405	11/21/2017	ZA-2017-4879-CU	Van Nuys	6	A 2,200 SF. RESTAURANT WITH DRIVE-THROUGH SERVICES AND OUTDOOR SEATING; ALLOWING THE HOURS OF OPERATION FROM 4:00A.M.TO 12A.M.(MIDNIGHT), 7 DAYS A WEEK.	CU-CONDITIONAL USE	KATIE ROUNDS; KAIDENCE GROUP (480)269-1235
7855 N HASKELL AVE 91406	11/28/2017	ENV-2017-4931-EAF	Lake Balboa	6	DEMOLITION OF AN EXISTING 114,052 SF. BUILDING AND SURFACE PARKING LOT AND NEW CONSTRUCTION OF AN APPROXIMATELY 148,182 SF. BUILDING FOR STORAGE OF HOUSEHOLD GOODS.	EAF-ENVIRONMENTAL ASSESSMENT	DAVE RAND/ALIX WISNER - ARMBRUSTER GOLDSMITH & DELVAC LLP (310)209-8800
13670 W SHERMAN WAY 91405	1/2/2018	ZA-2018-6-CU-CUB-ZBA-SPR	Greater Valley Glen	2	CONSTRUCTION OF A NEW 14,786 SQUARE FOOT CVS PHARMACY WITH MEZZANINE AND DRIVE-THROUGH PHARMACY WINDOW.	CU-CONDITIONAL USE	MARGARET TAYLOR (818)398-2740
14401 VALERIO ST 91405	1/29/2018	TT-72487-EXT	Van Nuys	2	SUBDIVISION OF A 21,719 SQUARE-FOOT LOT INTO SEVEN SINGLE FAMILY RESIDENCES		0-
14640 W ROSCOE BLVD 91402	2/5/2018	ZA-2018-664-CUB	Panorama City	6	A CONDITIONAL USE PERMIT (CUB) TO AUTHORIZE THE SALE OF BEER AND WINE FOR OFF-SITE CONSUMPTION IN CONJUNCTION WITH A (N) PROPOSED 18,802 SQ. FT. GROCERY STORE.	CUB-CONDITIONAL USE BEVERAGE-ALCOHOLI	DOUG COUPER (714)292-1056
6705 N SEPULVEDA BLVD	2/26/2018	ENV-2018-1046-EAF	Van Nuys	6	SMALL LOT SUBDIVISION OF 30 DETACHED SINGLE FAMILY DWELLING WITH ATTACHED 2 CAR	EAF-ENVIRONMENTAL	ARMIN GHARAI (818)758-0018
7401 N LANKERSHIM BLVD 91605	3/16/2018	ENV-2018-1501-EAF	North Hollywood Northeast	2	DEMOLITION AND CONSTRUCTION OF 108 UNITS (98 MARKET RATE, 1 MANAGERS UNIT, 9 EXTREMELY LOW INCOME), 5 STORIES MIX-USE COMMERCIAL/RESIDENTIAL BUILDING OVER BASEMENT PARKING.TOC TIER 1: TWO INCENTIVES	EAF-ENVIRONMENTAL ASSESSMENT	ARMIN GHARAI (818)634-6327
8011 N SEPULVEDA BLVD 91402	3/21/2018	AA-2018-1599-COC	North Hills East	6	DEMOLITION OF EXISTING COMMERCIAL BUILDING 4,092 SF AND CONSTRUCTION OF A NEW 5 STORY 32 UNIT RESIDENTIAL BUILDING.	COC-CERTIFICATE OF COMPLIANCE	TANYA SANET (818)568-8132
15945 SHERMAN WAY 91406	4/24/2018	TT-72578-EXT	Lake Balboa	6	5-LOT SUBDIVISION		0-
14411 W VANOWEN ST 91405	6/5/2018	ZA-2018-3223-ZV-ZAA	Van Nuys	6	CONVERSION OF A VACANT OFFICE BUILDING INTO A 22-UNIT APARTMENT WITH INCREASED FLOOR AREA AND NO CLEARANCE AROUND SAID	ZV-ZONE VARIANCE	ROBERT B. LAMISHAW, JPL ZONING SERVICES (818)435-2010
14421 W NORDHOFF ST 91402	8/24/2018	APCNV-2008-513-ZC-BL-EXT	Panorama City	7	PROPOSED 17 SMALL LOT SUBDIVISION.	ZC-ZONE CHANGE	0-

* All project data is gathered from the City of Los Angeles Planning Department Website Case Reports.

APPENDIX B
Traffic Counts

Location: Van Nuys Blvd & Saticoy St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-001
 Date: 12/12/2018

Total

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Saticoy St				Saticoy St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1,5 EL	0,5 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	51	159	12	0	4	317	93	0	71	9	66	0	8	7	14	0	811
7:15 AM	62	138	4	0	3	301	62	0	87	11	87	0	19	8	11	0	793
7:30 AM	92	199	7	0	1	263	61	0	143	5	123	0	30	18	17	0	959
7:45 AM	82	238	7	0	2	307	79	1	108	5	122	0	15	14	16	0	996
8:00 AM	73	222	6	0	0	292	51	0	124	8	128	0	11	8	12	0	935
8:15 AM	54	216	1	0	4	266	84	2	100	5	104	0	7	5	9	0	857
8:30 AM	67	182	2	0	3	261	73	0	65	7	85	0	5	3	6	0	759
8:45 AM	34	183	10	0	6	306	77	0	86	2	90	0	7	18	8	0	827
9:00 AM	45	214	2	0	6	272	67	1	95	7	83	0	7	7	4	0	810
9:15 AM	36	223	5	0	7	261	78	0	80	2	82	0	5	10	10	0	799
9:30 AM	37	243	7	0	4	269	74	0	73	0	102	0	5	5	10	0	829
9:45 AM	33	233	1	0	5	256	63	0	87	1	94	0	6	4	8	0	791
TOTAL VOLUMES:	NL 666	NT 2450	NR 64	NU 0	SL 45	ST 3371	SR 862	SU 4	EL 1119	ET 62	ER 1166	EU 0	WL 125	WT 107	WR 125	WU 0	TOTAL 10166
APPROACH %'s:	20,94%	77,04%	2,01%	0,00%	1,05%	78,72%	20,13%	0,09%	47,68%	2,64%	49,68%	0,00%	35,01%	29,97%	35,01%	0,00%	
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	301	875	21	0	7	1128	275	3	475	23	477	0	63	45	54	0	3747
PEAK HR FACTOR:	0,818	0,919	0,750	0,000	0,438	0,919	0,818	0,375	0,830	0,719	0,932	0,000	0,525	0,625	0,794	0,000	0,941
	0,915				0,908				0,899				0,623				

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Saticoy St				Saticoy St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	3 ST	0 SR	0 SU	1,5 EL	0,5 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
3:00 PM	50	292	21	0	11	313	91	0	132	7	81	0	6	7	13	0	1024
3:15 PM	51	342	28	0	10	249	73	0	164	11	88	0	5	11	16	0	1048
3:30 PM	75	351	9	0	13	252	88	0	126	7	80	0	3	19	20	0	1043
3:45 PM	59	374	4	0	5	285	91	1	150	3	75	0	9	29	15	0	1100
4:00 PM	69	326	6	0	3	269	89	0	130	1	83	0	12	50	36	0	1074
4:15 PM	62	383	8	0	3	275	70	0	145	1	72	0	6	15	11	0	1051
4:30 PM	79	322	3	0	2	269	90	0	168	0	60	0	8	19	9	0	1029
4:45 PM	74	363	1	0	2	296	88	0	124	0	74	0	6	4	0	0	1032
5:00 PM	88	336	5	0	1	274	78	0	153	1	71	0	6	16	6	0	1035
5:15 PM	79	386	12	0	3	262	84	0	156	3	76	0	4	10	7	0	1082
5:30 PM	73	373	7	0	2	271	86	0	146	5	73	0	10	11	5	0	1062
5:45 PM	67	333	2	0	3	271	69	0	152	3	67	0	4	12	2	0	985
TOTAL VOLUMES:	NL 826	NT 4181	NR 106	NU 0	SL 58	ST 3286	SR 997	SU 1	EL 1746	ET 42	ER 900	EU 0	WL 79	WT 203	WR 140	WU 0	TOTAL 12565
APPROACH %'s:	16,15%	81,77%	2,07%	0,00%	1,34%	75,68%	22,96%	0,02%	64,96%	1,56%	33,48%	0,00%	18,72%	48,10%	33,18%	0,00%	
PEAK HR:	03:30 PM - 04:30 PM																TOTAL
PEAK HR VOL:	265	1434	27	0	24	1081	338	1	551	12	310	0	30	113	82	0	4268
PEAK HR FACTOR:	0,883	0,936	0,750	0,000	0,462	0,948	0,929	0,250	0,918	0,429	0,934	0,000	0,625	0,565	0,569	0,000	0,970
	0,953				0,945				0,957				0,574				

Location: Van Nuys Blvd & Satcoy St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-001
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Satcoy St				Satcoy St				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
7:00 AM	51	171	12	0	4	327	96	0	73	9	67	0	10	10	18	0				848
7:15 AM	64	144	4	0	3	308	63	0	87	11	89	0	22	8	16	0				819
7:30 AM	93	204	9	0	1	267	61	0	144	5	125	0	37	19	21	0				986
7:45 AM	82	241	7	0	3	317	79	1	109	6	123	0	19	16	22	0				1025
8:00 AM	76	226	6	0	0	297	53	0	128	9	129	0	15	9	14	0				962
8:15 AM	56	224	1	0	4	272	85	2	101	5	104	0	8	7	10	0				879
8:30 AM	69	192	2	0	3	270	75	0	66	8	90	0	6	3	7	0				791
8:45 AM	35	191	11	0	8	315	78	0	88	2	92	0	8	19	9	0				856
9:00 AM	49	221	3	0	7	276	68	1	99	8	86	0	9	7	4	0				838
9:15 AM	37	231	5	0	7	267	80	0	81	2	85	0	6	10	10	0				821
9:30 AM	40	249	7	0	4	272	76	0	78	0	116	0	6	6	11	0				865
9:45 AM	33	239	2	0	6	264	66	0	90	1	104	0	6	4	9	0				824
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				TOTAL
APPROACH %'s:	685	2533	69	0	50	3452	880	4	1144	66	1210	0	152	118	151	0				10514
	20,84%	77,06%	2,10%	0,00%	1,14%	78,70%	20,06%	0,09%	47,27%	2,73%	50,00%	0,00%	36,10%	28,03%	35,87%	0,00%				
PEAK HR:	07:30 AM - 08:30 AM																TOTAL			
PEAK HR VOL:	307	895	23	0	8	1153	278	3	482	25	481	0	79	51	67	0				3852
PEAK HR FACTOR:	0,825	0,928	0,639	0,000	0,500	0,909	0,818	0,375	0,837	0,694	0,932	0,000	0,534	0,671	0,761	0,000				0,940
	0,928				0,901				0,901				0,640							

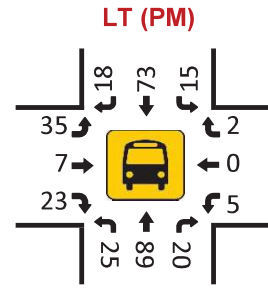
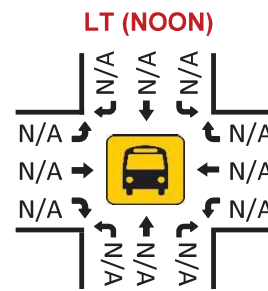
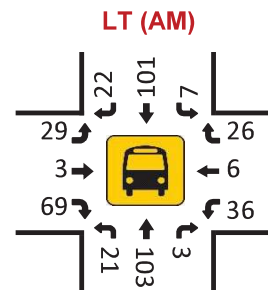
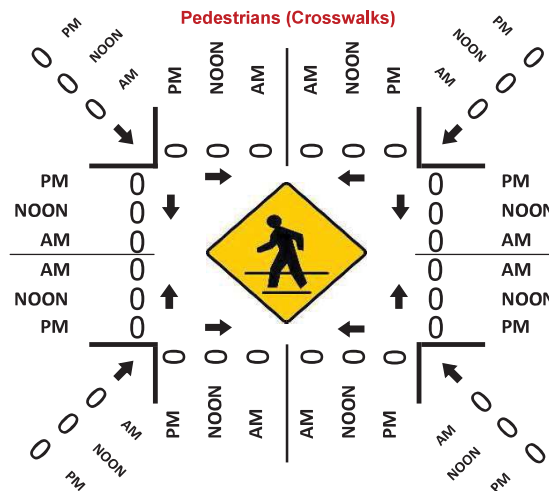
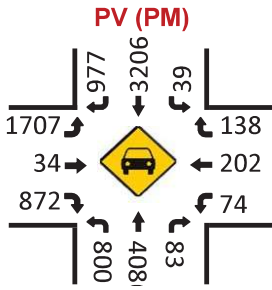
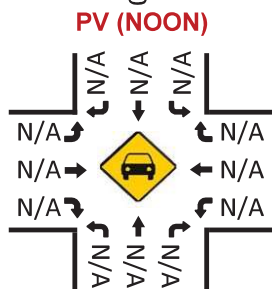
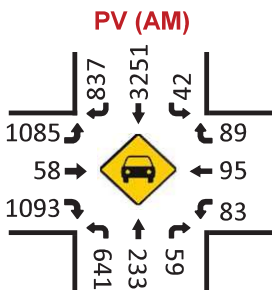
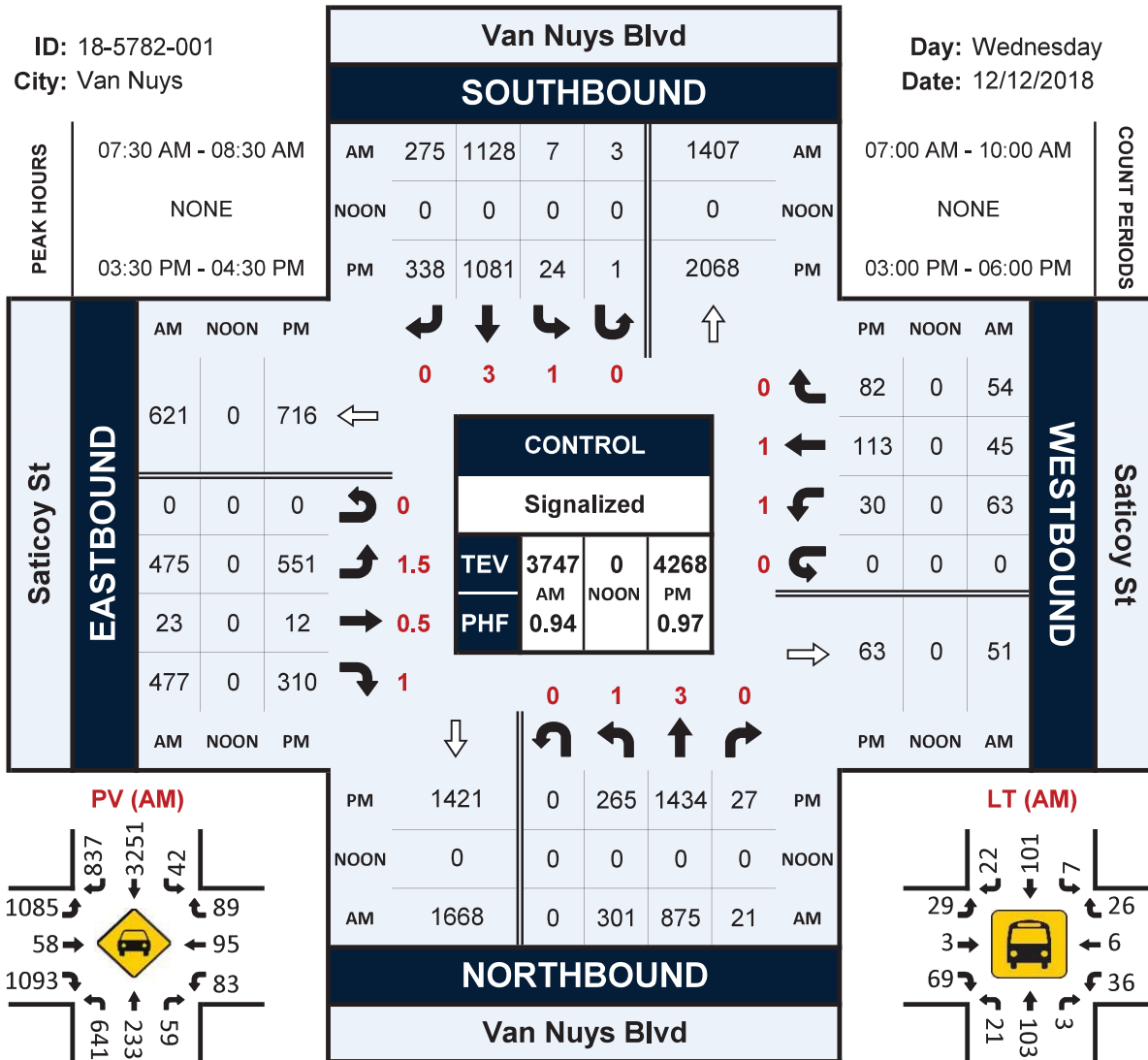
NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Satcoy St				Satcoy St				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
3:00 PM	51	299	23	0	15	320	93	0	134	8	82	0	6	7	13	0				1051
3:15 PM	52	349	35	0	14	253	73	0	167	13	92	0	6	11	17	0				1082
3:30 PM	76	356	11	0	18	255	90	0	126	7	85	0	3	20	20	0				1067
3:45 PM	61	381	5	0	6	290	92	1	152	4	78	0	10	29	15	0				1124
4:00 PM	70	331	6	0	3	275	90	0	131	1	84	0	12	50	37	0				1090
4:15 PM	62	387	9	0	3	278	70	0	147	1	73	0	6	15	11	0				1062
4:30 PM	83	326	3	0	2	272	90	0	173	0	61	0	9	19	9	0				1047
4:45 PM	75	365	1	0	2	302	89	0	130	0	75	0	6	4	0	0				1049
5:00 PM	89	340	5	0	1	277	81	0	156	1	73	0	7	16	6	0				1052
5:15 PM	80	389	13	0	3	267	86	0	157	3	76	0	4	10	7	0				1095
5:30 PM	74	379	7	0	2	272	88	0	148	5	73	0	10	11	5	0				1074
5:45 PM	70	336	2	0	3	273	70	0	152	4	68	0	4	12	2	0				996
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				TOTAL
APPROACH %'s:	843	4238	120	0	72	3334	1012	1	1773	47	920	0	83	204	142	0				12789
	16,21%	81,48%	2,31%	0,00%	1,63%	75,45%	22,90%	0,02%	64,71%	1,72%	33,58%	0,00%	19,35%	47,55%	33,10%	0,00%				
PEAK HR:	03:30 PM - 04:30 PM																TOTAL			
PEAK HR VOL:	269	1455	31	0	30	1098	342	1	556	13	320	0	31	114	83	0				4343
PEAK HR FACTOR:	0,88	0,940	0,705	0,000	0,417	0,947	0,929	0,250	0,914	0,464	0,941	0,000	0,646	0,570	0,561	0,000				0,966
	0,958				0,945				0,950				0,576							

Van Nuys Blvd & Saticoy St

Peak Hour Turning Movement Count

ID: 18-5782-001
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET:
 North/South Van Nuys Blvd

East/West Saticoy St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	294	272	186	98
BUSES	37	46	15	5
BUSES	84	84	9	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	326	7.45	400	7.00	265	7.30	47	7.30
PM PK 15 MIN	471	17.15	400	15.00	250	15.15	97	16.00
AM PK HOUR	1169	7.30	1457	7.00	960	7.30	120	7.15
PM PK HOUR	1779	16.45	1439	16.00	893	15.00	222	15.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	283	719	28	1030
8-9	219	776	18	1013
9-10	141	887	13	1041
15-16	226	1336	42	1604
16-17	278	1381	17	1676
17-18	297	1415	24	1736
TOTAL	1444	6514	142	8100

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	10	1157	290	1457
8-9	12	1108	277	1397
9-10	20	1034	274	1328
15-16	20	1081	335	1436
16-17	10	1093	336	1439
17-18	9	1074	310	1393
TOTAL	81	6547	1822	8450

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2487	17	2	0	1
2410	18	2	1	0
2369	29	3	2	0
3040	53	13	1	0
3115	35	10	3	0
3129	27	0	2	0
16550	179	30	9	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	404	29	387	820
8-9	369	20	402	791
9-10	320	9	307	636
15-16	561	22	310	893
16-17	555	2	282	839
17-18	598	10	282	890
TOTAL	2807	92	1970	4869

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	46	41	31	118
8-9	19	29	28	76
9-10	19	25	30	74
15-16	20	65	63	148
16-17	31	88	55	174
17-18	23	49	20	92
TOTAL	158	297	227	682

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
938	26	3	21	4
867	40	0	24	4
710	49	1	31	3
1041	75	1	47	14
1013	61	0	43	9
982	36	0	39	0
5551	287	5	205	34



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Van Nuys Blvd

East/West Saticoy St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

	<u>N/B</u>	<u>S/B</u>	<u>E/B</u>	<u>W/B</u>
DUAL-WHEELED	489	453	311	169
BIKES	37	46	15	1
BUSES	130	134	17	0

	<u>N/B</u>	<u>TIME</u>	<u>S/B</u>	<u>TIME</u>	<u>E/B</u>	<u>TIME</u>	<u>W/B</u>	<u>TIME</u>
<i>AMPK 15 MIN</i>	336	7.45	433	7.00	274	7.30	77	7.30
<i>PMPK 15 MIN</i>	446	17.15	436	15.00	274	15.15	99	16.00
<i>AMPK HOUR</i>	1245	7.30	1556	7.00	990	7.30	218	7.15
<i>PMPK HOUR</i>	1844	16.45	1497	16.00	952	15.00	228	15.30

NORTHBOUND Approach

Hours	<u>Lt</u>	<u>Th</u>	<u>Rt</u>	<u>Total</u>
7-8	290	780	32	1102
8-9	236	853	20	1109
9-10	159	963	17	1139
15-16	240	1403	74	1717
16-17	290	1433	19	1742
17-18	313	1469	27	1809
TOTAL	1528	6901	189	8618

SOUTHBOUND Approach

Hours	<u>Lt</u>	<u>Th</u>	<u>Rt</u>	<u>Total</u>
7-8	11	1244	301	1556
8-9	15	1173	293	1481
9-10	24	1095	292	1411
15-16	53	1141	350	1544
16-17	10	1146	341	1497
17-18	9	1109	327	1445
TOTAL	122	6908	1904	8934

TOTAL

XING S/L

XING N/L

Hours	<u>N-S</u>	<u>Ped</u>	<u>Sch</u>	<u>Ped</u>	<u>Sch</u>
7-8	2658	17	2	0	1
8-9	2590	18	2	1	0
9-10	2550	29	3	2	0
15-16	3261	53	13	1	0
16-17	3239	35	10	3	0
17-18	3254	27	0	2	0
TOTAL	17552	179	30	9	1

EASTBOUND Approach

Hours	<u>Lt</u>	<u>Th</u>	<u>Rt</u>	<u>Total</u>
7-8	415	31	404	850
8-9	388	24	415	827
9-10	350	11	391	752
15-16	583	32	337	952
16-17	583	2	293	878
17-18	615	13	290	918
TOTAL	2934	113	2130	5177

WESTBOUND Approach

Hours	<u>Lt</u>	<u>Th</u>	<u>Rt</u>	<u>Total</u>
7-8	88	53	77	218
8-9	37	38	40	115
9-10	27	27	34	88
15-16	25	67	65	157
16-17	33	88	57	178
17-18	25	49	20	94
TOTAL	235	322	293	850

TOTAL

XING W/L

XING E/L

Hours	<u>E-W</u>	<u>Ped</u>	<u>Sch</u>	<u>Ped</u>	<u>Sch</u>
7-8	1068	26	3	21	4
8-9	942	40	0	24	4
9-10	840	49	1	31	3
15-16	1109	75	1	47	14
16-17	1056	61	0	43	9
17-18	1012	36	0	39	0
TOTAL	6027	287	5	205	34

National Data & Surveying Services

Intersection Turning Movement Count

Location: Van Nuys Blvd & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-002
 Date: 12/12/2018

Total

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Valerio St				Valerio St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	3	0	0	1	3	0	0	0	2	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	10	138	10	0	11	305	3	0	10	25	16	0	29	37	23	0	617
7:15 AM	9	153	13	1	10	312	6	0	10	35	15	0	33	61	38	0	696
7:30 AM	13	185	19	0	17	281	6	0	14	44	18	0	29	65	29	0	720
7:45 AM	24	239	23	0	11	336	7	0	15	78	20	0	24	76	43	0	896
8:00 AM	18	207	23	0	19	318	9	0	12	51	29	0	24	56	39	0	805
8:15 AM	9	208	9	0	14	295	3	0	13	39	8	0	32	50	33	0	713
8:30 AM	8	162	17	0	20	270	7	0	10	28	6	0	18	33	27	0	606
8:45 AM	4	182	15	0	17	320	5	0	13	36	9	0	18	29	31	0	679
9:00 AM	6	181	20	0	10	281	5	0	11	29	8	0	18	25	26	1	621
9:15 AM	5	196	17	0	17	274	6	0	13	27	5	0	18	23	27	0	628
9:30 AM	12	223	16	0	22	270	7	0	4	29	13	0	18	30	15	0	659
9:45 AM	8	216	26	0	20	273	9	0	10	26	14	0	22	25	14	0	663
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	126	2290	208	1	188	3535	73	0	135	447	161	0	283	510	345	1	8303
APPROACH %'s :	4.80%	87.24%	7.92%	0.04%	4.95%	93.12%	1.92%	0.00%	18.17%	60.16%	21.67%	0.00%	24.85%	44.78%	30.29%	0.09%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	64	839	74	0	61	1230	25	0	54	212	75	0	109	247	144	0	3134
PEAK HR FACTOR :	0.667	0.878	0.804	0.000	0.803	0.915	0.694	0.000	0.900	0.679	0.647	0.000	0.852	0.813	0.837	0.000	0.874
		0.854				0.929				0.754				0.874			

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Valerio St				Valerio St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1	3	0	0	1	3	0	0	0	2	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
3:00 PM	15	265	39	0	24	317	4	0	13	36	10	0	21	65	35	0	844
3:15 PM	10	306	33	0	32	255	10	0	10	66	20	0	21	47	38	0	848
3:30 PM	15	293	24	0	29	282	10	0	16	57	14	0	21	54	32	0	847
3:45 PM	14	289	23	0	32	275	13	0	19	54	10	0	15	52	32	0	828
4:00 PM	16	268	24	2	36	258	16	0	16	47	18	0	21	33	30	0	785
4:15 PM	9	316	27	0	32	291	11	0	9	55	13	0	26	60	33	0	882
4:30 PM	15	273	32	0	43	278	13	0	9	57	12	0	20	59	28	0	839
4:45 PM	12	289	23	0	37	302	8	0	7	42	13	0	13	68	36	0	850
5:00 PM	19	280	47	0	39	291	16	0	9	47	8	0	31	71	29	0	887
5:15 PM	19	307	29	0	31	272	14	0	14	70	15	0	21	55	39	0	886
5:30 PM	15	267	36	0	33	299	17	0	15	51	10	0	24	61	34	0	862
5:45 PM	13	297	26	0	29	277	5	0	7	41	15	0	24	51	29	0	814
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	172	3450	363	2	397	3397	137	0	144	623	158	0	258	676	395	0	10172
APPROACH %'s :	4.31%	86.53%	9.10%	0.05%	10.10%	86.42%	3.49%	0.00%	15.57%	67.35%	17.08%	0.00%	19.41%	50.87%	29.72%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	65	1143	135	0	140	1164	55	0	45	210	46	0	89	255	138	0	3485
PEAK HR FACTOR :	0.855	0.931	0.718	0.000	0.897	0.964	0.809	0.000	0.750	0.750	0.767	0.000	0.718	0.898	0.885	0.000	0.982
		0.946				0.973				0.760				0.920			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Van Nuys Blvd & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-002
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Valerio St				Valerio St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	10	148	11	0	11	315	3	0	12	26	16	0	29	37	24	0	642
7:15 AM	9	159	13	1	11	322	6	0	11	36	15	0	33	61	38	0	715
7:30 AM	13	191	21	0	18	289	7	0	15	45	19	0	29	65	29	0	741
7:45 AM	24	242	23	0	11	350	8	0	16	79	20	0	24	76	43	0	916
8:00 AM	18	211	24	0	19	324	9	0	12	51	30	0	24	56	40	0	818
8:15 AM	10	217	9	0	14	301	3	0	14	39	8	0	32	50	33	0	730
8:30 AM	8	171	17	0	20	285	7	0	11	28	6	0	18	33	27	0	631
8:45 AM	4	189	15	0	17	330	5	0	13	36	9	0	18	30	31	0	697
9:00 AM	6	186	20	0	10	287	5	0	11	30	8	0	18	26	29	1	637
9:15 AM	5	202	18	0	18	281	6	0	13	27	5	0	19	24	27	0	645
9:30 AM	13	230	16	0	22	279	7	0	5	30	13	0	18	31	16	0	680
9:45 AM	8	222	26	0	20	285	10	0	11	26	14	0	23	25	14	0	684
TOTAL VOLUMES :	128	2368	213	1	191	3648	76	0	144	453	163	0	285	514	351	1	8536
APPROACH %'s :	4.72%	87.38%	7.86%	0.04%	4.88%	93.18%	1.94%	0.00%	18.95%	59.61%	21.45%	0.00%	24.76%	44.66%	30.50%	0.09%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	65	861	77	0	62	1264	27	0	57	214	77	0	109	247	145	0	3205
PEAK HR FACTOR :	0.677	0.889	0.802	0.000	0.816	0.903	0.750	0.000	0.891	0.677	0.642	0.000	0.852	0.813	0.843	0.000	0.875
	0.868				0.917				0.757				0.876				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
3:00 PM	16	275	40	0	24	323	4	0	13	37	10	0	22	65	36	0	865
3:15 PM	10	316	34	0	35	259	10	0	10	68	20	0	22	47	40	0	871
3:30 PM	15	301	24	0	29	288	10	0	16	57	14	0	22	55	32	0	863
3:45 PM	15	294	23	0	33	283	14	0	19	55	10	0	15	53	33	0	847
4:00 PM	16	273	25	2	37	263	16	0	17	47	18	0	21	34	30	0	799
4:15 PM	9	320	27	0	32	294	11	0	9	55	13	0	26	60	33	0	889
4:30 PM	15	279	32	0	44	281	13	0	9	57	12	0	20	59	29	0	850
4:45 PM	12	292	23	0	38	308	8	0	7	42	13	0	13	69	36	0	861
5:00 PM	19	285	47	0	40	295	16	0	9	47	8	0	31	72	29	0	898
5:15 PM	19	310	29	0	31	279	14	0	14	70	15	0	21	55	40	0	897
5:30 PM	15	272	36	0	33	300	17	0	15	51	10	0	24	62	36	0	871
5:45 PM	14	302	26	0	30	279	5	0	7	41	15	0	24	52	30	0	825
TOTAL VOLUMES :	175	3519	366	2	406	3452	138	0	145	627	158	0	261	683	404	0	10336
APPROACH %'s :	4.31%	86.63%	9.01%	0.05%	10.16%	86.39%	3.45%	0.00%	15.59%	67.42%	16.99%	0.00%	19.36%	50.67%	29.97%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	65	1159	135	0	142	1182	55	0	45	210	46	0	89	258	141	0	3527
PEAK HR FACTOR :	0.86	0.935	0.718	0.000	0.888	0.959	0.809	0.000	0.750	0.750	0.767	0.000	0.718	0.896	0.881	0.000	0.982
	0.949				0.974				0.760				0.924				



City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Van Nuys Blvd
 East/West Valerio St
 Day: Wednesday Date: 12/12/2018 Weather: SUNNY
 Hours: _____ Chckrs: NDS
 School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	240	276	22	42
BIKES	38	29	4	7
BUSES	84	78	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	286	7.45	342	8.00	111	7.45	143	7.45
PM PK 15 MIN	352	17.15	349	17.30	99	17.15	130	17.00
AM PK HOUR	955	7.30	1286	7.15	334	7.30	516	7.15
PM PK HOUR	1338	17.00	1343	16.45	343	15.15	473	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	57	701	64	822
8-9	38	734	63	835
9-10	30	795	78	903
15-16	52	1115	116	1283
16-17	54	1132	104	1290
17-18	65	1135	138	1338
TOTAL	296	5612	563	6471

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	47	1185	20	1252
8-9	70	1181	24	1275
9-10	67	1056	26	1149
15-16	111	1106	36	1253
16-17	144	1113	48	1305
17-18	129	1133	52	1314
TOTAL	568	6774	206	7548

TOTAL

XING S/L

XING N/L

Hours	N-S	Ped	Sch	Ped	Sch
7-8	2074	51	15	21	1
8-9	2110	35	0	15	0
9-10	2052	30	0	16	2
15-16	2536	93	18	24	4
16-17	2595	42	5	25	5
17-18	2652	78	9	32	1
TOTAL	14019	329	47	133	13

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	46	178	68	292
8-9	46	154	51	251
9-10	36	108	40	184
15-16	58	209	54	321
16-17	40	201	56	297
17-18	45	209	48	302
TOTAL	271	1059	317	1647

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	115	239	132	486
8-9	92	166	129	387
9-10	75	99	76	250
15-16	75	216	132	423
16-17	80	218	125	423
17-18	100	234	123	457
TOTAL	537	1172	717	2426

TOTAL

XING W/L

XING E/L

Hours	E-W	Ped	Sch	Ped	Sch
7-8	778	27	3	23	1
8-9	638	28	1	19	0
9-10	434	27	0	19	0
15-16	744	51	4	41	5
16-17	720	50	4	43	4
17-18	759	50	1	58	0
TOTAL	4073	233	13	203	10



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: **North/South** Van Nuys Blvd

East/West Valerio St

Day: Wednesday **Date:** 12/12/2018 **Weather:** SUNNY

Hours: _____ **Chekrs:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

	<u>N/B</u>	<u>S/B</u>	<u>E/B</u>	<u>W/B</u>
DUAL-WHEELED	400	460	44	73
BIKES	38	29	4	2
BUSES	131	121	0	0

	<u>N/B</u>	<u>TIME</u>	<u>S/B</u>	<u>TIME</u>	<u>E/B</u>	<u>TIME</u>	<u>W/B</u>	<u>TIME</u>
<i>AMPK 15 MIN</i>	297	7.45	358	8.00	115	7.45	143	7.45
<i>PMPK 15 MIN</i>	359	17.15	353	17.30	99	17.15	132	17.00
<i>AMPK HOUR</i>	1023	7.30	1399	7.15	348	7.30	518	7.15
<i>PMPK HOUR</i>	1399	17.00	1399	16.45	351	15.15	488	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	56	762	68	886
8-9	40	806	65	911
9-10	32	863	80	975
15-16	56	1205	121	1382
16-17	52	1188	107	1347
17-18	67	1194	138	1399
TOTAL	303	6018	579	6900

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	51	1301	24	1376
8-9	70	1259	24	1353
9-10	70	1148	28	1246
15-16	121	1176	38	1335
16-17	151	1164	48	1363
17-18	134	1173	52	1359
TOTAL	597	7221	214	8032

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2262	51	15	21	1
2264	35	0	15	0
2221	30	0	16	2
2717	93	18	24	4
2710	42	5	25	5
2758	78	9	32	1
14932	329	47	133	13

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	54	186	70	310
8-9	50	154	53	257
9-10	40	113	40	193
15-16	58	217	54	329
16-17	42	201	56	299
17-18	45	209	48	302
TOTAL	289	1080	321	1690

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	115	239	134	488
8-9	92	169	131	392
9-10	78	106	86	270
15-16	81	220	141	442
16-17	80	222	128	430
17-18	100	241	135	476
TOTAL	546	1197	755	2498

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
798	27	3	23	1
649	28	1	19	0
463	27	0	19	0
771	51	4	41	5
729	50	4	43	4
778	50	1	58	0
4188	233	13	203	10

Location: Tyrone Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-003
 Date: 12/12/2018

Total

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Valerio St				Valerio St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
7:00 AM	4	4	2	0	1	4	4	0	1	47	10	0	6	65	1	0					149
7:15 AM	4	1	3	0	0	5	4	0	6	73	15	0	4	103	2	0					220
7:30 AM	8	12	4	0	1	6	2	0	6	79	26	0	15	80	3	0					242
7:45 AM	4	9	7	0	1	7	6	0	12	82	24	0	13	108	1	0					274
8:00 AM	8	9	2	0	1	6	4	0	4	69	10	0	7	93	0	0					213
8:15 AM	3	2	3	0	1	5	3	0	5	51	11	0	2	105	1	0					192
8:30 AM	4	3	2	0	1	1	1	0	3	51	6	0	3	69	4	0					148
8:45 AM	1	6	2	0	2	4	7	0	5	68	9	0	2	67	1	0					174
9:00 AM	1	6	5	0	1	7	4	0	2	47	5	0	4	62	1	0					145
9:15 AM	7	6	1	0	0	1	3	0	3	47	8	0	5	57	2	0					140
9:30 AM	1	4	6	0	5	3	3	0	2	59	2	0	0	47	1	0					133
9:45 AM	3	8	2	0	3	5	6	0	4	59	7	0	3	39	5	0					144
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL				
APPROACH %'s:	48	70	39	0	17	54	47	0	53	732	133	0	64	895	22	0	2174				
	30.57%	44.59%	24.84%	0.00%	14.41%	45.76%	39.83%	0.00%	5.77%	79.74%	14.49%	0.00%	6.52%	91.23%	2.24%	0.00%					
PEAK HR:	07:15 AM - 08:15 AM																TOTAL				
PEAK HR VOL:	24	31	16	0	3	24	16	0	28	303	75	0	39	384	6	0	949				
PEAK HR FACTOR:	0.750	0.646	0.571	0.000	0.750	0.857	0.667	0.000	0.583	0.924	0.721	0.000	0.650	0.889	0.500	0.000	0.866				
	0.740				0.768				0.860				0.879								

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Valerio St				Valerio St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
3:00 PM	4	6	2	0	1	5	2	0	7	74	3	0	3	92	3	0	202
3:15 PM	5	8	4	0	3	7	5	0	9	79	7	0	1	76	3	0	207
3:30 PM	6	9	4	0	2	4	6	0	3	77	14	0	3	83	3	0	214
3:45 PM	6	14	4	0	3	2	7	0	2	85	9	0	3	84	6	0	225
4:00 PM	0	2	6	0	2	2	3	0	5	82	4	0	1	86	3	0	196
4:15 PM	6	8	3	0	3	4	5	0	8	76	13	0	2	79	3	0	210
4:30 PM	5	13	7	0	2	4	5	0	4	112	9	0	3	102	4	0	270
4:45 PM	8	9	3	0	0	0	1	0	7	67	10	0	8	100	1	0	214
5:00 PM	7	6	8	0	1	7	10	0	5	94	10	0	4	93	4	0	249
5:15 PM	5	9	6	0	4	8	1	0	5	93	7	0	7	111	4	0	260
5:30 PM	2	6	5	0	0	6	4	0	4	91	13	0	2	96	2	0	231
5:45 PM	0	7	4	0	2	8	8	0	7	57	6	0	5	78	4	0	186
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	54	97	56	0	23	57	57	0	66	987	105	0	42	1080	40	0	2664
	26.09%	46.86%	27.05%	0.00%	16.79%	41.61%	41.61%	0.00%	5.70%	85.23%	9.07%	0.00%	3.61%	92.94%	3.44%	0.00%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	25	37	24	0	7	19	17	0	21	366	36	0	22	406	13	0	993
PEAK HR FACTOR:	0.781	0.712	0.750	0.000	0.438	0.594	0.425	0.000	0.750	0.817	0.900	0.000	0.688	0.914	0.813	0.000	0.919
	0.860				0.597				0.846				0.904				

Location: Tyrone Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-003
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Valerio St				Valerio St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	4	4	2	0	1	4	4	0	1	48	11	0	6	65	1	0					151
7:15 AM	4	1	3	0	0	5	4	0	6	74	16	0	4	104	2	0					223
7:30 AM	8	13	4	0	1	6	2	0	6	82	26	0	15	81	4	0					248
7:45 AM	4	9	7	0	1	7	6	0	12	83	24	0	14	108	1	0					276
8:00 AM	8	9	2	0	1	6	4	0	4	69	10	0	7	94	0	0					214
8:15 AM	3	2	3	0	1	5	3	0	5	51	11	0	2	106	1	0					193
8:30 AM	4	3	2	0	1	1	1	0	3	51	6	0	3	70	4	0					149
8:45 AM	1	6	2	0	2	4	7	0	5	70	9	0	2	69	1	0					178
9:00 AM	1	6	5	0	1	8	4	0	2	47	5	0	4	65	1	0					149
9:15 AM	7	6	1	0	0	1	4	0	4	48	9	0	5	57	2	0					144
9:30 AM	1	4	6	0	6	3	4	0	2	61	2	0	0	48	1	0					138
9:45 AM	3	9	2	0	4	6	6	0	4	60	7	0	3	39	6	0					149
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	30,19%	45,28%	24,53%	0,00%	15,32%	45,16%	39,52%	0,00%	5,78%	79,66%	14,56%	0,00%	6,53%	91,06%	2,41%	0,00%					2212
PEAK HR :	07:15 AM - 08:15 AM																TOTAL				
PEAK HR VOL :	24	32	16	0	3	24	16	0	28	308	76	0	40	387	7	0					961
PEAK HR FACTOR :	0,750	0,615	0,571	0,000	0,750	0,857	0,667	0,000	0,583	0,928	0,731	0,000	0,667	0,896	0,438	0,000					0,870
	0,720				0,768				0,866				0,882								

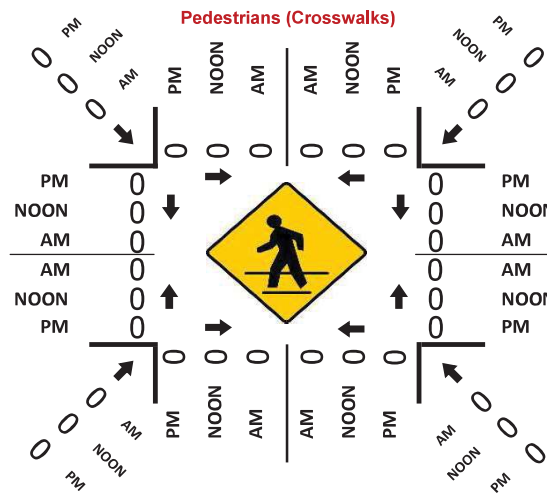
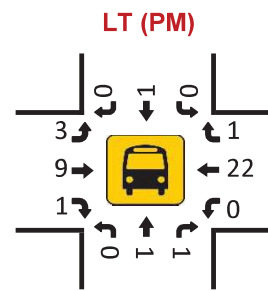
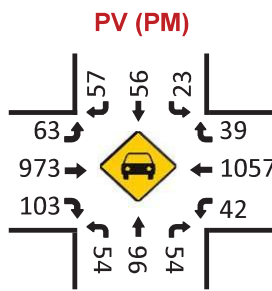
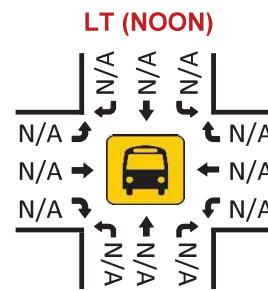
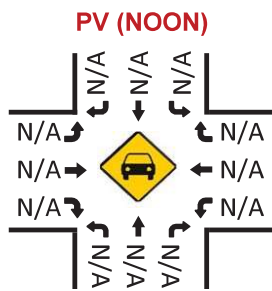
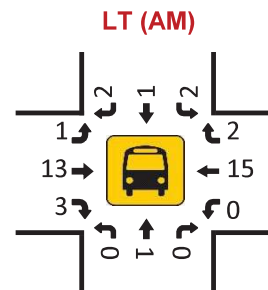
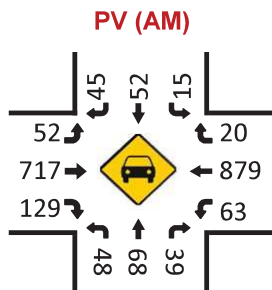
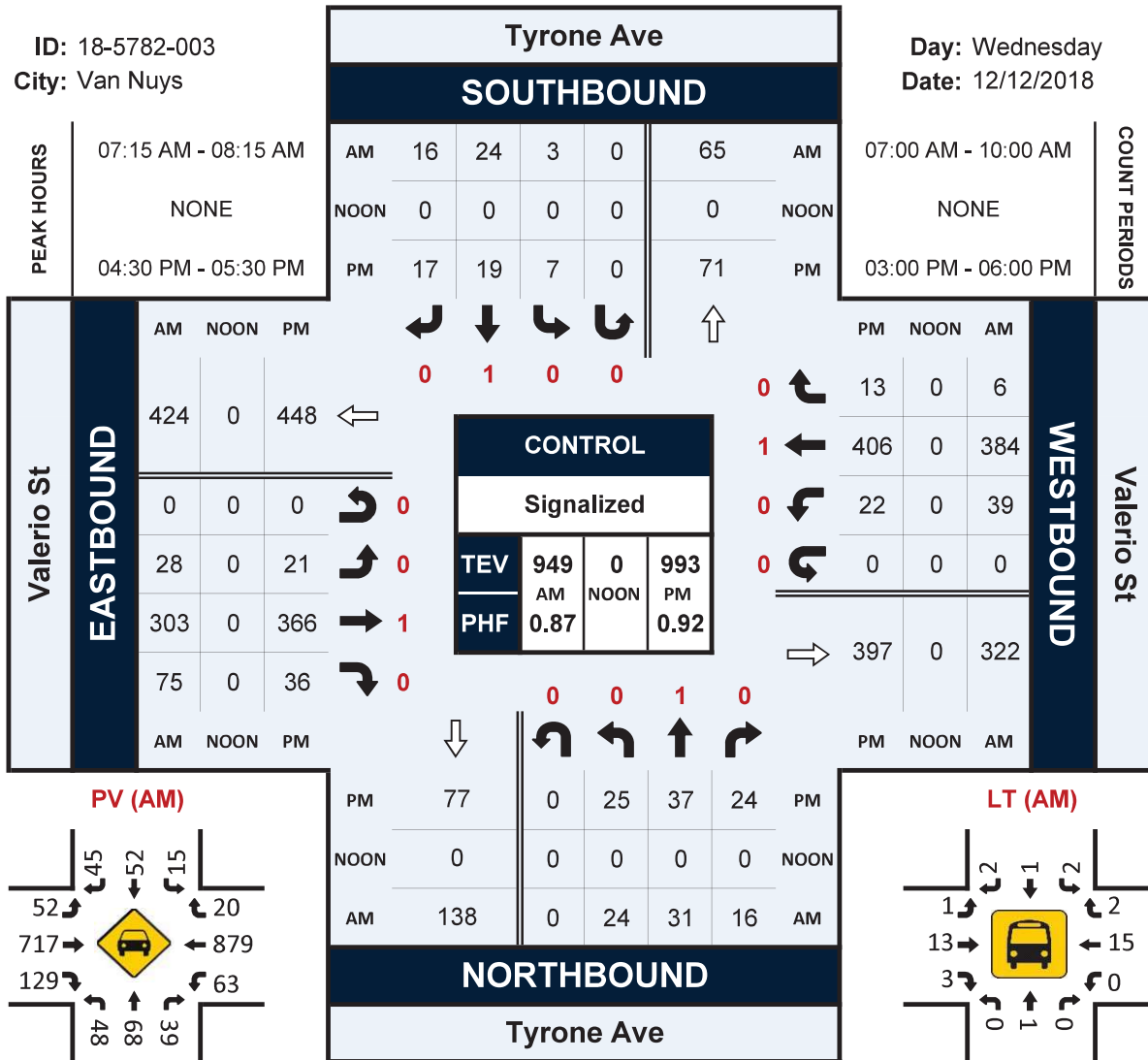
NS/EW Streets:	Tyrone Ave				Tyrone Ave				Valerio St				Valerio St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
3:00 PM	4	6	3	0	1	5	2	0	7	76	3	0	3	93	3	0					206
3:15 PM	5	8	5	0	3	8	5	0	11	83	7	0	1	79	3	0					218
3:30 PM	6	9	4	0	2	4	6	0	3	77	16	0	3	84	3	0					217
3:45 PM	6	14	4	0	3	2	7	0	2	85	9	0	3	85	6	0					226
4:00 PM	0	2	6	0	2	2	3	0	5	83	4	0	1	87	4	0					199
4:15 PM	6	8	3	0	3	4	5	0	8	77	13	0	2	79	3	0					211
4:30 PM	5	14	7	0	2	4	5	0	4	113	10	0	3	103	4	0					274
4:45 PM	8	9	3	0	0	0	1	0	7	67	10	0	8	100	1	0					214
5:00 PM	7	6	8	0	1	7	10	0	5	95	10	0	4	94	4	0					251
5:15 PM	5	9	6	0	4	8	1	0	5	94	7	0	7	112	4	0					262
5:30 PM	2	6	5	0	0	6	4	0	4	91	13	0	2	99	2	0					234
5:45 PM	0	7	4	0	2	8	8	0	7	57	6	0	5	80	4	0					188
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	25,71%	46,67%	27,62%	0,00%	16,67%	42,03%	41,30%	0,00%	5,79%	85,01%	9,20%	0,00%	3,57%	92,95%	3,48%	0,00%					2700
PEAK HR :	04:30 PM - 05:30 PM																TOTAL				
PEAK HR VOL :	25	38	24	0	7	19	17	0	21	369	37	0	22	409	13	0					1001
PEAK HR FACTOR :	0,78	0,679	0,750	0,000	0,438	0,594	0,425	0,000	0,750	0,816	0,925	0,000	0,688	0,913	0,813	0,000					0,913
	0,837				0,597				0,841				0,902								

Tyrone Ave & Valerio St

Peak Hour Turning Movement Count

ID: 18-5782-003
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Tyrone Ave

East/West Valerio St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	5	7	39	43
BUSES	2	1	7	7
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AM PK 15 MIN</i>	23	7.30	14	7.45	117	7.45	121	7.45
<i>PM PK 15 MIN</i>	24	15.45	18	17.00	123	16.30	120	17.15
<i>AM PK HOUR</i>	70	7.15	43	7.15	399	7.15	424	7.15
<i>PM PK HOUR</i>	85	16.30	59	17.00	418	16.30	435	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	20	25	16	61
8-9	16	20	9	45
9-10	12	23	14	49
15-16	21	37	12	70
16-17	19	31	19	69
17-18	14	28	23	65

TOTAL	102	164	93	359
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SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	3	22	16	41
8-9	5	16	15	36
9-10	7	14	14	35
15-16	9	17	20	46
16-17	7	10	14	31
17-18	7	29	23	59

TOTAL	38	108	102	248
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TOTAL

N-S
102
81
84
116
100
124

607

XING S/L

Ped	Sch
7	6
2	0
10	2
20	3
8	2
12	1

59	14
----	----

XING N/L

Ped	Sch
0	1
0	1
0	0
2	0
2	1
1	0

5	3
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EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	25	275	72	372
8-9	17	236	36	289
9-10	10	207	21	238
15-16	18	308	33	359
16-17	24	333	35	392
17-18	21	332	36	389

TOTAL	115	1691	233	2039
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WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	37	354	6	397
8-9	14	326	6	346
9-10	12	199	8	219
15-16	10	327	15	352
16-17	14	364	10	388
17-18	18	366	14	398

TOTAL	105	1936	59	2100
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TOTAL

E-W
769
635
457
711
780
787

4139

XING W/L

Ped	Sch
3	2
1	1
1	0
5	1
16	3
14	1

40	8
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XING E/L

Ped	Sch
2	0
2	0
1	0
5	1
4	0
3	0

17	1
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City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: **North/South** Tyrone Ave

East/West Valerio St

Day: Wednesday **Date:** 12/12/2018 **Weather:** SUNNY

Hours: _____ **Chckrs:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	10	14	71	73
BIKES	2	1	7	3
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AMPK 15 MIN</i>	25	7.30	14	7.45	119	7.45	123	7.45
<i>PMPK 15 MIN</i>	26	15.45	18	17.00	127	16.30	123	17.15
<i>AMPK HOUR</i>	72	7.15	43	7.15	412	7.15	434	7.15
<i>PMPK HOUR</i>	87	16.30	59	17.00	427	16.30	444	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	20	27	16	63
8-9	16	20	9	45
9-10	12	25	14	51
15-16	21	37	16	74
16-17	19	33	19	71
17-18	14	28	23	65
TOTAL	102	170	97	369

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	3	22	16	41
8-9	5	16	15	36
9-10	11	18	18	47
15-16	9	19	20	48
16-17	7	10	14	31
17-18	7	29	23	59
TOTAL	42	114	106	262

TOTAL

XING S/L

XING N/L

Hours	N-S	Ped	Sch	Ped	Sch
7-8	104	7	6	0	1
8-9	81	2	0	0	1
9-10	98	10	2	0	0
15-16	122	20	3	2	0
16-17	102	8	2	2	1
17-18	124	12	1	1	0
TOTAL	631	59	14	5	3

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	25	287	77	389
8-9	17	241	36	294
9-10	12	216	23	251
15-16	23	321	35	379
16-17	24	340	37	401
17-18	21	337	36	394
TOTAL	122	1742	244	2108

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	39	358	8	405
8-9	14	339	6	359
9-10	12	209	10	231
15-16	10	341	15	366
16-17	14	369	12	395
17-18	18	385	14	417
TOTAL	107	2001	65	2173

TOTAL

XING W/L

XING E/L

Hours	E-W	Ped	Sch	Ped	Sch
7-8	794	3	2	2	0
8-9	653	1	1	2	0
9-10	482	1	0	1	0
15-16	745	5	1	5	1
16-17	796	16	3	4	0
17-18	811	14	1	3	0
TOTAL	4281	40	8	17	1

Location: Hazeltine Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-004
 Date: 12/12/2018

Total

NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Valerio St				Valerio St				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
AM	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
7:00 AM	12	48	11	0	15	54	1	0	0	32	21	0	29	72	21	0				316
7:15 AM	14	54	25	0	18	59	0	0	0	50	33	0	20	82	30	0				385
7:30 AM	17	68	18	0	28	70	3	0	1	64	27	0	25	83	47	0				451
7:45 AM	24	67	20	0	20	52	2	0	2	65	24	0	17	97	56	0				446
8:00 AM	28	65	19	0	21	44	0	0	0	48	24	0	20	82	42	0				393
8:15 AM	20	59	16	0	11	41	3	0	0	37	19	0	19	78	14	0				317
8:30 AM	10	48	19	0	15	30	0	0	0	39	14	0	14	57	27	0				273
8:45 AM	19	48	11	0	10	34	0	0	0	41	31	0	22	55	29	0				300
9:00 AM	15	44	12	0	19	41	1	0	0	39	16	0	7	46	17	0				257
9:15 AM	14	43	14	0	13	33	2	0	2	37	14	0	19	41	14	0				246
9:30 AM	15	46	9	0	24	49	0	0	1	43	28	0	13	37	26	0				291
9:45 AM	12	33	10	0	18	60	1	0	3	43	19	0	20	29	25	0				273
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				TOTAL
	200	623	184	0	212	567	13	0	9	538	270	0	225	759	348	0				3948
APPROACH %'s:	19.86%	61.87%	18.27%	0.00%	26.77%	71.59%	1.64%	0.00%	1.10%	65.85%	33.05%	0.00%	16.89%	56.98%	26.13%	0.00%				
PEAK HR:	07:15 AM - 08:15 AM																TOTAL			
PEAK HR VOL:	83	254	82	0	87	225	5	0	3	227	108	0	82	344	175	0				1675
PEAK HR FACTOR:	0.741	0.934	0.820	0.000	0.777	0.804	0.417	0.000	0.375	0.873	0.818	0.000	0.820	0.887	0.781	0.000				0.928
	0.935				0.785				0.918				0.884							

NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Valerio St				Valerio St				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
PM	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
3:00 PM	27	50	20	0	26	39	1	0	1	48	23	0	10	62	22	0				329
3:15 PM	24	62	30	0	23	45	0	0	1	64	17	0	8	60	21	0				355
3:30 PM	24	61	32	0	18	40	1	0	1	70	15	0	12	71	15	0				360
3:45 PM	17	59	30	0	28	50	2	0	0	77	18	0	19	58	21	0				379
4:00 PM	29	71	30	0	42	64	3	0	2	62	17	0	10	68	29	0				427
4:15 PM	29	66	31	0	30	45	0	0	0	68	22	0	9	58	29	0				387
4:30 PM	23	53	33	0	33	38	2	0	0	81	30	0	6	89	27	0				415
4:45 PM	31	48	35	0	20	47	1	0	1	52	17	0	14	76	22	0				364
5:00 PM	26	69	28	0	40	52	2	0	1	78	30	0	18	73	26	0				443
5:15 PM	26	73	31	0	28	60	2	0	0	73	30	0	17	99	26	0				465
5:30 PM	26	62	21	0	18	49	2	0	2	70	31	0	13	74	13	0				381
5:45 PM	20	65	31	0	27	43	3	0	1	53	19	0	9	63	13	0				347
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				TOTAL
	302	739	352	0	333	572	19	0	10	796	269	0	145	851	264	0				4652
APPROACH %'s:	21.68%	53.05%	25.27%	0.00%	36.04%	61.90%	2.06%	0.00%	0.93%	74.05%	25.02%	0.00%	11.51%	67.54%	20.95%	0.00%				
PEAK HR:	04:30 PM - 05:30 PM																TOTAL			
PEAK HR VOL:	106	243	127	0	121	197	7	0	2	284	107	0	55	337	101	0				1687
PEAK HR FACTOR:	0.855	0.832	0.907	0.000	0.756	0.821	0.875	0.000	0.500	0.877	0.892	0.000	0.764	0.851	0.935	0.000				0.907
	0.915				0.864				0.885				0.868							

Location: Hazeltine Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-004
 Date: 12/12/2018

Totals PCE

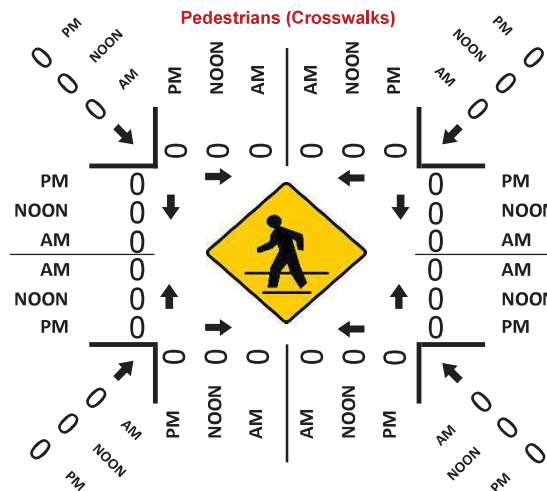
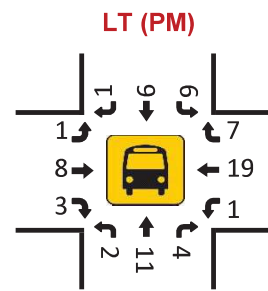
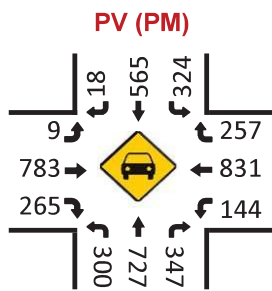
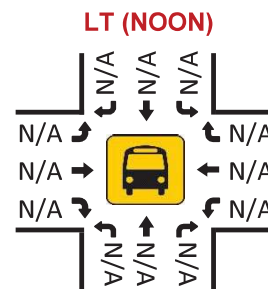
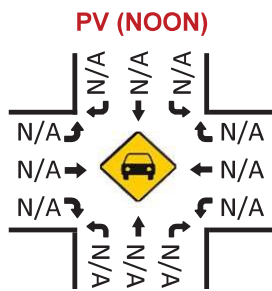
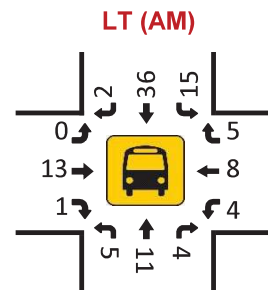
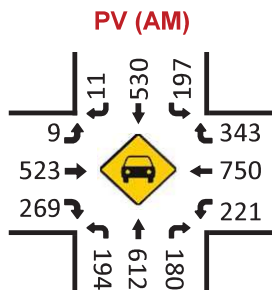
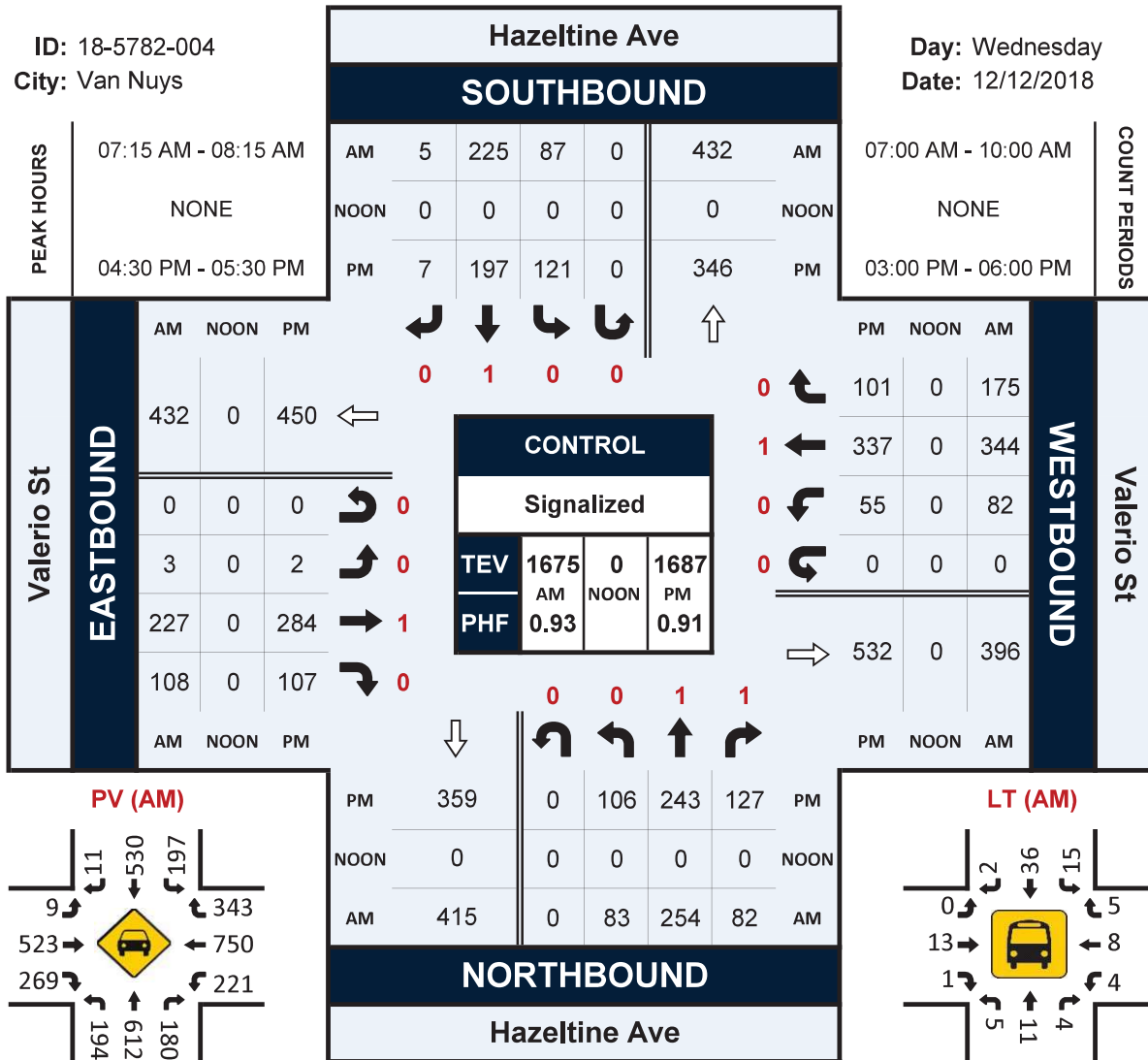
NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Valerio St				Valerio St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	12	48	12	0	16	55	1	0	0	32	22	0	29	72	21	0					320
7:15 AM	15	55	25	0	19	60	0	0	0	51	33	0	20	82	31	0					391
7:30 AM	17	68	18	0	29	71	3	0	1	65	27	0	25	83	47	0					454
7:45 AM	25	67	20	0	20	52	2	0	2	68	24	0	17	97	56	0					450
8:00 AM	29	66	19	0	22	46	0	0	0	48	24	0	20	83	43	0					400
8:15 AM	20	60	16	0	11	42	4	0	0	37	19	0	19	78	14	0					320
8:30 AM	10	49	20	0	15	31	0	0	0	39	14	0	15	58	27	0					278
8:45 AM	20	49	11	0	11	35	0	0	0	42	31	0	23	57	30	0					309
9:00 AM	15	44	13	0	20	41	1	0	0	39	16	0	7	48	18	0					262
9:15 AM	14	44	15	0	14	35	3	0	2	38	14	0	20	42	14	0					255
9:30 AM	16	47	9	0	25	55	0	0	1	45	28	0	14	37	26	0					303
9:45 AM	12	34	10	0	20	66	1	0	3	44	19	0	20	29	25	0					283
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	205	631	188	0	222	589	15	0	9	548	271	0	229	766	352	0					4025
	20,02%	61,62%	18,36%	0,00%	26,88%	71,31%	1,82%	0,00%	1,09%	66,18%	32,73%	0,00%	17,00%	56,87%	26,13%	0,00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL				
PEAK HR VOL :	86	256	82	0	90	229	5	0	3	232	108	0	82	345	177	0					1695
PEAK HR FACTOR :	0,741	0,941	0,820	0,000	0,776	0,806	0,417	0,000	0,375	0,853	0,818	0,000	0,820	0,889	0,790	0,000					0,933
	0,930				0,786				0,912				0,888								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0					
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
3:00 PM	27	51	20	0	26	40	1	0	2	50	23	0	10	63	23	0					336
3:15 PM	24	63	30	0	23	45	0	0	1	68	18	0	8	62	22	0					364
3:30 PM	24	62	33	0	19	40	1	0	1	70	15	0	12	72	15	0					364
3:45 PM	18	60	30	0	29	50	2	0	0	77	19	0	19	59	22	0					385
4:00 PM	29	72	31	0	44	65	3	0	2	63	17	0	11	69	30	0					436
4:15 PM	29	67	32	0	31	46	0	0	0	69	22	0	9	58	30	0					393
4:30 PM	23	54	33	0	34	38	3	0	0	82	31	0	6	90	27	0					421
4:45 PM	31	48	35	0	20	47	1	0	1	52	17	0	14	76	23	0					365
5:00 PM	26	70	29	0	40	55	2	0	1	79	31	0	18	74	26	0					451
5:15 PM	26	73	31	0	28	60	2	0	0	74	30	0	17	100	26	0					467
5:30 PM	27	63	21	0	18	49	2	0	2	70	31	0	13	76	13	0					385
5:45 PM	20	65	32	0	28	44	3	0	1	53	19	0	9	64	13	0					351
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	304	748	357	0	340	579	20	0	11	807	273	0	146	863	270	0					4718
	21,58%	53,09%	25,34%	0,00%	36,21%	61,66%	2,13%	0,00%	1,01%	73,97%	25,02%	0,00%	11,42%	67,47%	21,11%	0,00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL				
PEAK HR VOL :	106	245	128	0	122	200	8	0	2	287	109	0	55	340	102	0					1704
PEAK HR FACTOR :	0,85	0,839	0,914	0,000	0,763	0,833	0,667	0,000	0,500	0,875	0,879	0,000	0,764	0,850	0,944	0,000					0,912
	0,921				0,851				0,881				0,869								

Hazeltine Ave & Valerio St

Peak Hour Turning Movement Count

ID: 18-5782-004
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Hazeltine Ave

East/West Valerio St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	40	71	34	46
BUSES	6	3	7	8
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AM PK 15 MIN</i>	110	7.45	98	7.30	90	7.30	170	7.45
<i>PM PK 15 MIN</i>	130	17.15	105	16.00	109	16.30	140	17.15
<i>AM PK HOUR</i>	417	7.30	314	7.00	333	7.15	598	7.15
<i>PM PK HOUR</i>	473	16.30	327	15.45	388	16.30	486	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	65	236	73	374
8-9	75	216	64	355
9-10	54	160	43	257
15-16	91	227	111	429
16-17	112	233	127	472
17-18	97	267	109	473
TOTAL	494	1339	527	2360

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	76	232	6	314
8-9	55	142	2	199
9-10	66	156	3	225
15-16	93	173	4	270
16-17	120	191	5	316
17-18	111	202	9	322
TOTAL	521	1096	29	1646

TOTAL

N-S
688
554
482
699
788
795
4006

XING S/L

Ped	Sch
7	3
1	0
2	1
9	1
6	2
9	3
34	10

XING N/L

Ped	Sch
1	1
0	0
2	1
5	1
0	0
1	0
9	3

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	3	206	104	313
8-9	0	163	88	251
9-10	6	155	77	238
15-16	2	252	71	325
16-17	3	259	85	347
17-18	4	272	109	385
TOTAL	18	1307	534	1859

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	91	334	153	578
8-9	73	266	110	449
9-10	57	150	80	287
15-16	49	244	76	369
16-17	38	288	103	429
17-18	57	299	78	434
TOTAL	365	1581	600	2546

TOTAL

E-W
891
700
525
694
776
819
4405

XING W/L

Ped	Sch
0	1
0	0
0	0
8	2
5	0
3	0
16	3

XING E/L

Ped	Sch
8	7
9	3
12	3
5	2
8	1
4	2
46	18



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Hazeltine Ave

East/West Valerio St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	73	120	61	80
BIKES	6	3	7	3
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AMPK 15 MIN	112	7.45	103	7.30	93	7.30	170	7.45
PMPK 15 MIN	110	17.15	112	16.00	113	16.30	143	17.15
AMPK HOUR	425	7.30	328	7.00	343	7.15	604	7.15
PMPK HOUR	479	16.30	345	15.45	398	16.30	497	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	69	238	75	382
8-9	79	224	66	369
9-10	57	169	47	273
15-16	93	236	113	442
16-17	112	241	131	484
17-18	99	271	113	483
TOTAL	509	1379	545	2433

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	84	238	6	328
8-9	59	154	4	217
9-10	79	197	5	281
15-16	97	175	4	276
16-17	129	196	7	332
17-18	114	208	9	331
TOTAL	562	1168	35	1765

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
710	7	3	1	1
586	1	0	0	0
554	2	1	2	1
718	9	1	5	1
816	6	2	0	0
814	9	3	1	0
4198	34	10	9	3

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	3	216	106	325
8-9	0	166	88	254
9-10	6	166	77	249
15-16	4	265	75	344
16-17	3	266	87	356
17-18	4	276	111	391
TOTAL	20	1355	544	1919

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	91	334	155	580
8-9	77	276	114	467
9-10	61	156	83	300
15-16	49	256	82	387
16-17	40	293	110	443
17-18	57	314	78	449
TOTAL	375	1629	622	2626

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
905	0	1	8	7
721	0	0	9	3
549	0	0	12	3
731	8	2	5	2
799	5	0	8	1
840	3	0	4	2
4545	16	3	46	18

Location: Woodman Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-005
 Date: 12/12/2018

Total

NS/EW Streets:	Woodman Ave				Woodman Ave				Valerio St				Valerio St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	3	0	0	1	3	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	7	175	1	0	5	424	95	0	49	7	14	0	5	8	12	0	802
7:15 AM	10	202	3	0	12	528	129	0	83	10	19	0	10	9	10	0	1025
7:30 AM	15	275	2	0	12	510	156	0	92	5	20	0	12	6	15	0	1120
7:45 AM	18	282	4	0	1	467	132	0	88	1	24	0	7	8	15	0	1047
8:00 AM	16	264	2	0	3	415	99	0	66	4	20	0	8	7	17	0	921
8:15 AM	11	196	2	0	3	356	99	0	58	3	14	0	5	7	12	0	766
8:30 AM	7	205	3	0	4	393	77	0	52	1	28	0	4	4	7	0	785
8:45 AM	16	172	4	0	5	425	71	0	45	7	26	0	6	4	4	0	785
9:00 AM	14	186	2	0	2	312	54	0	52	3	22	0	2	2	4	0	655
9:15 AM	7	209	1	1	6	344	37	0	50	9	25	0	4	4	3	0	700
9:30 AM	13	211	4	0	1	332	56	0	65	1	14	0	3	7	6	0	713
9:45 AM	9	226	2	0	2	367	52	0	51	3	18	0	3	6	5	0	744
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	143	2603	30	1	56	4873	1057	0	751	54	244	0	69	72	110	0	10063
	5.15%	93.73%	1.08%	0.04%	0.94%	81.41%	17.66%	0.00%	71.59%	5.15%	23.26%	0.00%	27.49%	28.69%	43.82%	0.00%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	59	1023	11	0	28	1920	516	0	329	20	83	0	37	30	57	0	4113
PEAK HR FACTOR:	0,819	0,907	0,688	0,000	0,583	0,909	0,827	0,000	0,894	0,500	0,865	0,000	0,771	0,833	0,838	0,000	0,918
	0,899				0,909				0,923				0,939				

NS/EW Streets:	Woodman Ave				Woodman Ave				Valerio St				Valerio St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1	3	0	0	1	3	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
3:00 PM	12	359	3	0	4	301	61	0	67	3	13	0	3	7	11	0	844
3:15 PM	9	365	6	0	3	326	69	0	90	9	14	0	4	7	11	0	913
3:30 PM	20	364	7	0	3	298	77	0	75	6	25	0	3	7	15	0	900
3:45 PM	24	355	5	0	2	325	67	0	106	5	13	0	5	10	15	0	932
4:00 PM	21	396	2	0	6	307	77	0	102	4	13	0	7	10	17	0	962
4:15 PM	18	361	5	0	7	311	70	0	102	4	25	0	3	11	12	0	929
4:30 PM	6	360	5	0	6	348	92	0	82	7	17	0	7	13	26	0	969
4:45 PM	12	341	9	0	6	333	85	0	90	5	17	0	8	12	27	0	945
5:00 PM	18	337	8	1	7	336	93	0	93	6	13	0	7	12	24	0	955
5:15 PM	18	356	8	0	10	320	104	0	93	4	8	0	4	14	23	0	962
5:30 PM	11	393	6	0	5	303	69	0	94	6	11	0	2	21	18	0	939
5:45 PM	14	337	6	0	6	322	54	0	100	6	16	0	4	9	13	0	887
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	183	4324	70	1	65	3830	918	0	1094	65	185	0	57	133	212	0	11137
	4.00%	94.45%	1.53%	0.02%	1.35%	79.58%	19.07%	0.00%	81.40%	4.84%	13.76%	0.00%	14.18%	33.08%	52.74%	0.00%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	54	1394	30	1	29	1337	374	0	358	22	55	0	26	51	100	0	3831
PEAK HR FACTOR:	0,750	0,968	0,833	0,250	0,725	0,960	0,899	0,000	0,962	0,786	0,809	0,000	0,813	0,911	0,926	0,000	0,988
	0,968				0,975				0,971				0,941				

Location: Woodman Ave & Valerio St
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-005
 Date: 12/12/2018

Totals PCE

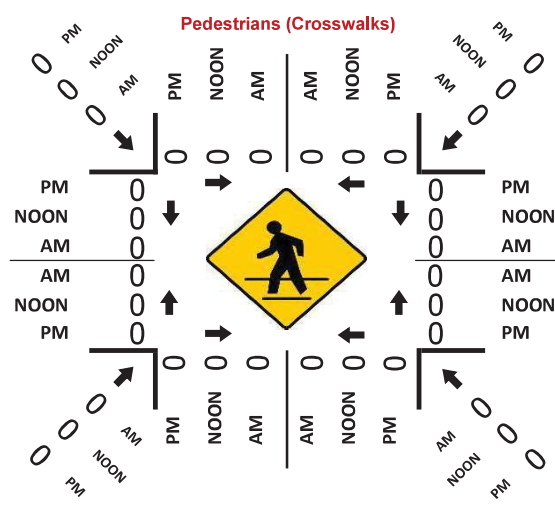
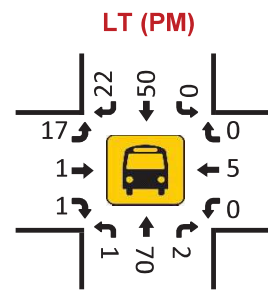
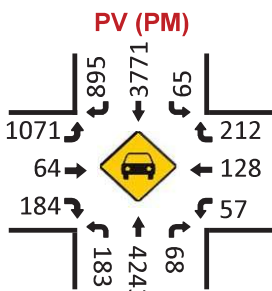
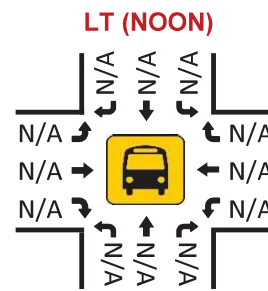
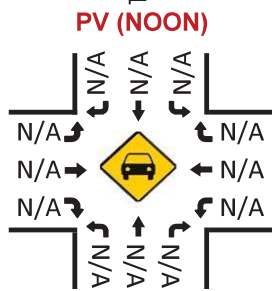
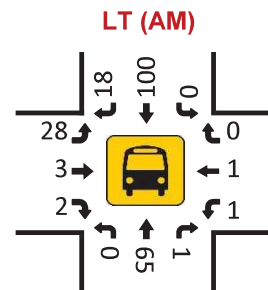
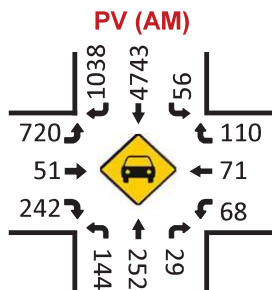
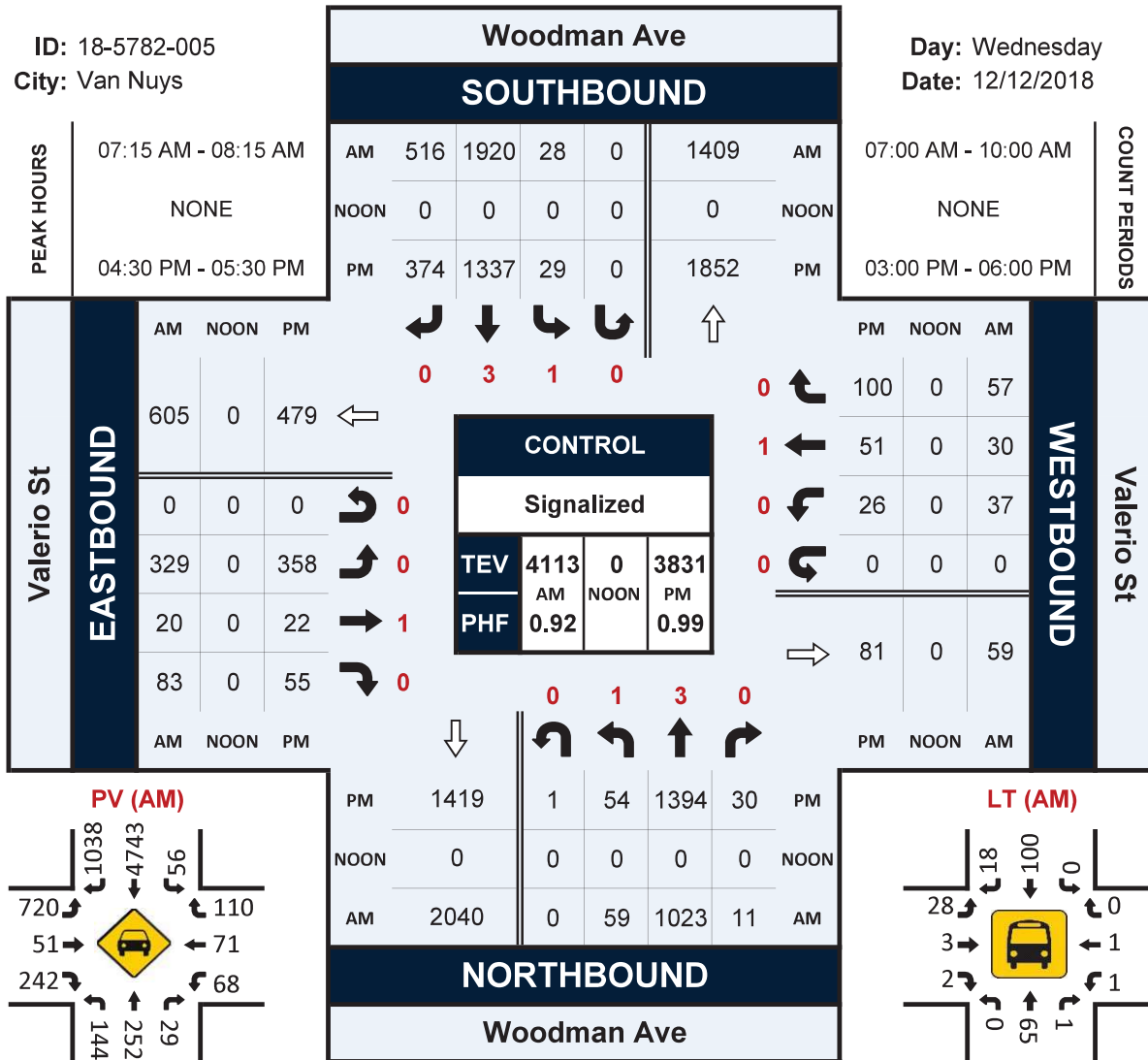
NS/EW Streets:	Woodman Ave				Woodman Ave				Valerio St				Valerio St				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	7	179	1	0	5	431	96	0	50	7	14	0	5	8	12	0					815
7:15 AM	10	208	3	0	12	534	130	0	85	11	19	0	10	9	10	0					1041
7:30 AM	15	283	2	0	12	516	157	0	97	5	20	0	12	6	15	0					1140
7:45 AM	18	288	4	0	1	476	132	0	89	1	24	0	7	9	15	0					1064
8:00 AM	16	269	2	0	3	429	100	0	66	5	20	0	8	7	17	0					942
8:15 AM	11	198	2	0	3	365	99	0	58	3	14	0	5	7	12	0					777
8:30 AM	7	209	3	0	4	407	79	0	53	1	28	0	4	4	7	0					806
8:45 AM	16	173	5	0	5	433	75	0	46	8	27	0	6	4	4	0					802
9:00 AM	14	197	2	0	2	320	56	0	53	3	22	0	2	2	4	0					677
9:15 AM	7	212	1	1	6	348	38	0	53	9	25	0	5	4	3	0					712
9:30 AM	13	217	4	0	1	336	57	0	68	1	15	0	3	7	6	0					728
9:45 AM	9	230	2	0	2	374	52	0	53	3	18	0	3	6	5	0					757
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	143	2663	31	1	56	4969	1071	0	771	57	246	0	70	73	110	0					10261
	5,04%	93,83%	1,09%	0,04%	0,92%	81,51%	17,57%	0,00%	71,79%	5,31%	22,91%	0,00%	27,67%	28,85%	43,48%	0,00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL				
PEAK HR VOL :	59	1048	11	0	28	1955	519	0	337	22	83	0	37	31	57	0					4187
PEAK HR FACTOR :	0,819	0,910	0,688	0,000	0,583	0,915	0,826	0,000	0,869	0,500	0,865	0,000	0,771	0,861	0,838	0,000					0,918
	0,902				0,913				0,906				0,947								
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
3:00 PM	12	366	3	0	4	308	63	0	69	3	13	0	3	7	11	0					862
3:15 PM	9	371	6	0	3	330	71	0	94	9	14	0	4	7	11	0					929
3:30 PM	20	375	7	0	3	303	79	0	76	6	25	0	3	7	15	0					919
3:45 PM	24	359	5	0	2	331	68	0	107	5	13	0	5	11	15	0					945
4:00 PM	21	401	2	0	6	309	78	0	104	4	14	0	7	10	17	0					973
4:15 PM	18	367	6	0	7	314	71	0	103	4	25	0	3	11	12	0					941
4:30 PM	6	365	5	0	6	354	93	0	84	7	17	0	7	13	26	0					983
4:45 PM	12	343	10	0	6	334	86	0	91	5	17	0	8	12	27	0					951
5:00 PM	19	338	8	1	7	340	94	0	94	6	13	0	7	12	24	0					963
5:15 PM	18	360	8	0	10	320	105	0	93	5	8	0	4	14	23	0					968
5:30 PM	11	396	6	0	5	304	70	0	95	6	11	0	2	23	18	0					947
5:45 PM	14	341	6	0	6	327	55	0	101	6	16	0	4	10	13	0					899
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	184	4382	72	1	65	3874	933	0	1111	66	186	0	57	137	212	0					11280
	3,97%	94,46%	1,55%	0,02%	1,33%	79,52%	19,15%	0,00%	81,51%	4,84%	13,65%	0,00%	14,04%	33,74%	52,22%	0,00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL				
PEAK HR VOL :	55	1406	31	1	29	1348	378	0	362	23	55	0	26	51	100	0					3865
PEAK HR FACTOR :	0,72	0,963	0,775	0,250	0,725	0,952	0,900	0,000	0,963	0,821	0,809	0,000	0,813	0,911	0,926	0,000					0,983
	0,967				0,969				0,973				0,941								

Woodman Ave & Valerio St

Peak Hour Turning Movement Count

ID: 18-5782-005
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Woodman Ave

East/West Valerio St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	167	231	61	7
BUSES	26	44	4	5
BUSES	8	9	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	297	7.45	672	7.30	112	7.30	33	7.30
PM PK 15 MIN	409	16.00	438	16.30	129	16.15	47	16.45
AM PK HOUR	1067	7.15	2432	7.00	420	7.15	123	7.15
PM PK HOUR	1546	15.15	1724	16.30	471	15.30	177	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	50	907	10	967
8-9	50	821	10	881
9-10	44	805	9	858
15-16	65	1416	21	1502
16-17	57	1429	19	1505
17-18	61	1410	28	1499
TOTAL	327	6788	97	7212

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	30	1893	509	2432
8-9	15	1537	336	1888
9-10	11	1330	193	1534
15-16	12	1229	262	1503
16-17	25	1281	319	1625
17-18	28	1273	314	1615
TOTAL	121	8543	1933	10597

TOTAL

N-S
3399
2769
2392
3005
3130
3114
17809

XING S/L

Ped	Sch
2	1
6	0
5	1
13	1
16	2
11	0
53	5

XING N/L

Ped	Sch
11	2
7	0
12	0
13	0
11	1
12	1
66	4

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	301	22	77	400
8-9	218	13	87	318
9-10	202	16	78	296
15-16	328	23	65	416
16-17	367	20	71	458
17-18	376	21	48	445
TOTAL	1792	115	426	2333

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	34	30	52	116
8-9	23	22	40	85
9-10	11	19	18	48
15-16	15	30	52	97
16-17	25	46	82	153
17-18	17	52	78	147
TOTAL	125	199	322	646

TOTAL

E-W
516
403
344
513
611
592
2979

XING W/L

Ped	Sch
5	1
9	0
9	0
17	2
12	0
21	0
73	3

XING E/L

Ped	Sch
13	2
29	0
18	0
22	2
23	2
18	0
123	6



City Of Los Angeles
 Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Woodman Ave

East/West Valerio St

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

	<u>N/B</u>	<u>S/B</u>	<u>E/B</u>	<u>W/B</u>
DUAL-WHEELED	289	400	105	13
BIKES	26	44	4	2
BUSES	16	18	0	0

	<u>N/B</u>	<u>TIME</u>	<u>S/B</u>	<u>TIME</u>	<u>E/B</u>	<u>TIME</u>	<u>W/B</u>	<u>TIME</u>
<i>AMPK 15 MIN</i>	312	7.45	685	7.30	122	7.30	33	7.30
<i>PMPK 15 MIN</i>	386	16.00	455	16.30	132	16.15	47	16.45
<i>AMPK HOUR</i>	1122	7.15	2504	7.00	442	7.15	125	7.15
<i>PMPK HOUR</i>	1602	15.15	1759	16.30	486	15.30	177	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	50	964	10	1024
8-9	50	851	12	913
9-10	43	858	9	910
15-16	65	1473	21	1559
16-17	57	1478	23	1558
17-18	62	1437	28	1527
TOTAL	327	7061	103	7491

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	30	1959	515	2504
8-9	15	1638	353	2006
9-10	11	1380	203	1594
15-16	12	1276	281	1569
16-17	25	1313	328	1666
17-18	28	1295	324	1647
TOTAL	121	8861	2004	10986

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
3528	2	1	11	2
2919	6	0	7	0
2504	5	1	12	0
3128	13	1	13	0
3224	16	2	11	1
3174	11	0	12	1
18477	53	5	66	4

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	321	24	77	422
8-9	223	17	89	329
9-10	227	16	80	323
15-16	346	23	65	434
16-17	382	20	73	475
17-18	383	23	48	454
TOTAL	1882	123	432	2437

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	34	32	52	118
8-9	23	22	40	85
9-10	13	19	18	50
15-16	15	32	52	99
16-17	25	46	82	153
17-18	17	59	78	154
TOTAL	127	210	322	659

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
540	5	1	13	2
414	9	0	29	0
373	9	0	18	0
533	17	2	22	2
628	12	0	23	2
608	21	0	18	0
3096	73	3	123	6

Location: Van Nuys Blvd & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-006
 Date: 12/12/2018

Total

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	2 NL	3 NT	0 NR	0 NU	2 SL	3 ST	0 SR	0 SU	2 EL	3 ET	0 ER	0 EU	2 WL	3 WT	0 WR	0 WU	
7:00 AM	32	110	14	0	31	291	29	0	26	223	28	0	34	231	40	0	1089
7:15 AM	44	103	31	0	58	281	29	0	24	278	20	0	39	263	24	0	1194
7:30 AM	46	160	28	0	45	295	24	0	38	288	24	0	55	279	34	0	1316
7:45 AM	56	202	25	0	76	252	29	0	44	303	20	0	39	266	39	0	1351
8:00 AM	46	181	34	0	68	299	39	0	60	247	31	0	52	238	41	0	1336
8:15 AM	39	159	25	0	46	259	33	0	35	267	23	0	47	259	38	0	1230
8:30 AM	32	140	31	0	58	253	31	0	37	237	45	0	51	231	41	0	1187
8:45 AM	33	130	23	0	52	263	30	0	33	252	42	0	40	214	53	0	1165
9:00 AM	31	144	27	0	62	235	26	0	40	237	29	0	42	172	43	0	1088
9:15 AM	37	135	22	0	60	195	34	0	49	265	24	0	34	190	52	0	1097
9:30 AM	40	194	37	0	67	224	40	0	37	246	21	0	32	197	48	0	1183
9:45 AM	44	169	26	0	72	213	26	0	50	242	22	0	39	224	54	0	1181
TOTAL VOLUMES :	NL 480	NT 1827	NR 323	NU 0	SL 695	ST 3060	SR 370	SU 0	EL 473	ET 3085	ER 329	EU 0	WL 504	WT 2764	WR 507	WU 0	TOTAL 14417
APPROACH %'s :	18.25%	69.47%	12.28%	0.00%	16.85%	74.18%	8.97%	0.00%	12.17%	79.37%	8.46%	0.00%	13.35%	73.22%	13.43%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	187	702	112	0	235	1105	125	0	177	1105	98	0	193	1042	152	0	5233
PEAK HR FACTOR :	0,835	0,869	0,824	0,000	0,773	0,924	0,801	0,000	0,738	0,912	0,790	0,000	0,877	0,934	0,927	0,000	0,968
	0,884				0,902				0,940				0,942				

NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	2 NL	3 NT	0 NR	0 NU	2 SL	3 ST	0 SR	0 SU	2 EL	3 ET	0 ER	0 EU	2 WL	3 WT	0 WR	0 WU	
3:00 PM	46	204	38	0	75	203	45	0	64	301	23	0	54	248	53	0	1354
3:15 PM	68	245	43	0	81	212	42	0	60	248	24	0	29	213	59	0	1324
3:30 PM	65	232	45	0	73	200	55	0	59	303	20	0	36	274	39	0	1401
3:45 PM	53	240	53	0	69	223	41	0	56	242	14	0	44	251	49	0	1335
4:00 PM	59	230	40	0	93	199	41	0	55	303	15	0	31	243	57	0	1366
4:15 PM	59	266	44	0	87	202	46	0	64	264	15	0	32	249	61	0	1389
4:30 PM	48	245	37	0	68	207	60	0	56	311	24	0	50	256	38	0	1400
4:45 PM	53	260	44	0	102	234	43	0	63	261	21	0	36	261	43	0	1421
5:00 PM	54	251	38	0	97	222	36	0	68	291	27	0	43	283	62	0	1472
5:15 PM	69	279	42	0	103	211	45	0	51	283	11	0	35	243	47	0	1419
5:30 PM	57	263	36	0	93	204	46	0	53	336	18	0	46	284	40	0	1476
5:45 PM	50	271	51	0	85	212	42	0	58	261	15	0	35	257	43	0	1380
TOTAL VOLUMES :	NL 681	NT 2986	NR 511	NU 0	SL 1026	ST 2529	SR 542	SU 0	EL 707	ET 3404	ER 227	EU 0	WL 471	WT 3062	WR 591	WU 0	TOTAL 16737
APPROACH %'s :	16.30%	71.47%	12.23%	0.00%	25.04%	61.73%	13.23%	0.00%	16.30%	78.47%	5.23%	0.00%	11.42%	74.25%	14.33%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	233	1053	160	0	395	871	170	0	235	1171	77	0	160	1071	192	0	5788
PEAK HR FACTOR :	0,844	0,944	0,909	0,000	0,959	0,931	0,924	0,000	0,864	0,871	0,713	0,000	0,870	0,943	0,774	0,000	0,980
	0,927				0,947				0,911				0,917				

Location: Van Nuys Blvd & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-006
 Date: 12/12/2018

Totals PCE

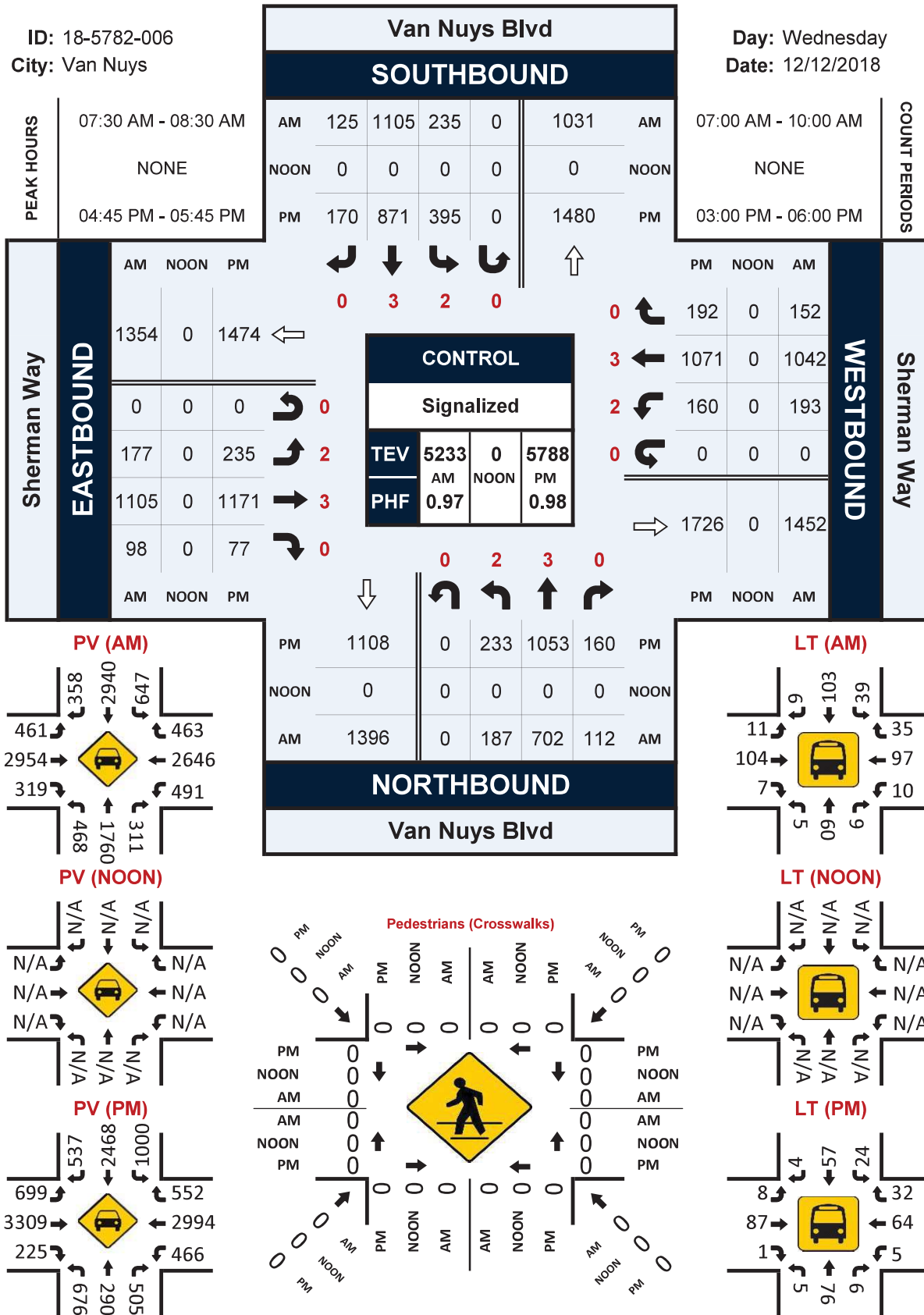
NS/EW Streets:	Van Nuys Blvd				Van Nuys Blvd				Sherman Way				Sherman Way				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	33	115	15	0	32	300	32	0	27	229	30	0	34	238	46	0					1131
7:15 AM	45	109	32	0	62	286	29	0	25	282	22	0	39	272	25	0					1228
7:30 AM	46	163	28	0	49	300	24	0	39	296	24	0	55	284	36	0					1344
7:45 AM	56	204	25	0	78	266	32	0	44	311	20	0	40	270	40	0					1386
8:00 AM	46	184	34	0	71	305	40	0	60	254	32	0	55	241	43	0					1365
8:15 AM	41	163	26	0	48	261	33	0	36	274	23	0	50	271	42	0					1268
8:30 AM	35	143	32	0	63	263	32	0	37	243	46	0	52	239	47	0					1232
8:45 AM	34	133	26	0	55	267	32	0	33	258	43	0	41	222	58	0					1202
9:00 AM	32	147	28	0	64	237	26	0	42	245	29	0	42	175	43	0					1110
9:15 AM	40	138	22	0	62	202	35	0	50	272	25	0	35	204	54	0					1139
9:30 AM	40	197	38	0	71	229	40	0	38	260	21	0	32	200	51	0					1217
9:45 AM	46	172	27	0	76	222	27	0	52	256	22	0	40	230	57	0					1227
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	494	1868	333	0	731	3138	382	0	483	3180	337	0	515	2846	542	0					14849
	18,33%	69,31%	12,36%	0,00%	17,20%	73,82%	8,99%	0,00%	12,08%	79,50%	8,43%	0,00%	13,19%	72,92%	13,89%	0,00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL				
PEAK HR VOL :	189	714	113	0	246	1132	129	0	179	1135	99	0	200	1066	161	0					5363
PEAK HR FACTOR :	0,844	0,875	0,831	0,000	0,788	0,928	0,806	0,000	0,746	0,912	0,773	0,000	0,909	0,938	0,936	0,000					0,967
	0,891				0,906				0,942				0,951								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0					
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
3:00 PM	47	208	38	0	76	207	46	0	65	308	23	0	55	251	56	0					1380
3:15 PM	68	253	43	0	83	215	44	0	61	255	26	0	30	216	64	0					1358
3:30 PM	66	238	46	0	74	204	56	0	59	309	20	0	36	281	41	0					1430
3:45 PM	53	246	54	0	72	226	41	0	56	249	14	0	45	253	50	0					1359
4:00 PM	60	233	40	0	94	202	42	0	56	312	15	0	31	247	61	0					1393
4:15 PM	59	269	44	0	89	204	46	0	64	270	16	0	32	252	66	0					1411
4:30 PM	48	248	37	0	68	210	60	0	57	320	24	0	51	258	41	0					1422
4:45 PM	53	262	45	0	104	239	43	0	63	265	21	0	36	265	45	0					1441
5:00 PM	54	253	39	0	99	224	36	0	68	292	27	0	43	286	64	0					1485
5:15 PM	70	282	42	0	105	213	46	0	51	284	11	0	35	245	49	0					1433
5:30 PM	58	266	36	0	95	209	46	0	53	337	18	0	46	289	41	0					1494
5:45 PM	50	276	51	0	85	215	42	0	58	265	15	0	36	259	44	0					1396
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	686	3034	515	0	1044	2568	548	0	711	3466	230	0	476	3102	622	0					17002
	16,20%	71,64%	12,16%	0,00%	25,10%	61,73%	13,17%	0,00%	16,13%	78,65%	5,22%	0,00%	11,33%	73,86%	14,81%	0,00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL				
PEAK HR VOL :	235	1063	162	0	403	885	171	0	235	1178	77	0	160	1085	199	0					5853
PEAK HR FACTOR :	0,84	0,942	0,900	0,000	0,960	0,926	0,929	0,000	0,864	0,874	0,713	0,000	0,870	0,939	0,777	0,000					0,979
	0,926				0,945				0,913				0,919								

Van Nuys Blvd & Sherman Way

Peak Hour Turning Movement Count

ID: 18-5782-006
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Van Nuys Blvd

East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	182	272	258	287
BUSES	24	44	15	17
BUSES	64	78	32	48

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AM PK 15 MIN</i>	283	7.45	397	8.00	359	7.45	360	7.30
<i>PM PK 15 MIN</i>	386	17.15	374	16.45	407	17.30	383	17.00
<i>AM PK HOUR</i>	990	7.30	1445	7.15	1343	7.15	1344	7.30
<i>PM PK HOUR</i>	1447	17.00	1425	16.45	1475	16.45	1401	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	176	567	95	838
8-9	148	596	107	851
9-10	146	631	109	886
15-16	230	896	175	1301
16-17	218	991	164	1373
17-18	228	1053	166	1447
TOTAL	1146	4734	816	6696

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	196	1083	108	1387
8-9	215	1056	131	1402
9-10	250	837	122	1209
15-16	292	822	181	1295
16-17	345	832	189	1366
17-18	374	847	168	1389
TOTAL	1672	5477	899	8048

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2225	53	5	37	2
2253	39	4	45	0
2095	73	3	74	3
2596	68	4	107	11
2739	84	6	98	11
2836	79	8	123	3
14744	396	30	484	30

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	128	1064	87	1279
8-9	163	968	137	1268
9-10	171	950	95	1216
15-16	235	1062	81	1378
16-17	234	1108	74	1416
17-18	230	1163	71	1464
TOTAL	1161	6315	545	8021

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	166	1010	132	1308
8-9	181	904	160	1245
9-10	145	756	186	1087
15-16	160	966	191	1317
16-17	148	990	191	1329
17-18	158	1054	188	1400
TOTAL	958	5680	1048	7686

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2587	75	8	47	1
2513	64	6	50	4
2303	84	0	65	2
2695	136	12	65	5
2745	100	4	67	8
2864	90	6	92	4
15707	549	36	386	24



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Van Nuys Blvd

East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekers: NDS

School Day: YES District: _____ I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	304	461	440	491
BIKES	24	44	15	5
BUSES	103	131	55	87

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AMPK 15 MIN	291	7.45	423	8.00	378	7.45	380	7.30
PMPK 15 MIN	351	17.15	391	16.45	410	17.30	398	17.00
AMPK HOUR	1031	7.30	1569	7.15	1418	7.15	1448	7.30
PMPK HOUR	1496	17.00	1482	16.45	1497	16.45	1459	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	180	610	100	890
8-9	156	638	118	912
9-10	158	672	115	945
15-16	234	961	181	1376
16-17	220	1028	166	1414
17-18	232	1096	168	1496
TOTAL	1180	5005	848	7033

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	227	1173	117	1517
8-9	243	1112	137	1492
9-10	279	900	128	1307
15-16	313	868	187	1368
16-17	361	867	191	1419
17-18	389	880	170	1439
TOTAL	1812	5800	930	8542

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2407	53	5	37	2
2404	39	4	45	0
2252	73	3	74	3
2744	68	4	107	11
2833	84	6	98	11
2935	79	8	123	3
15575	396	30	484	30

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	135	1128	96	1359
8-9	166	1038	144	1348
9-10	182	1040	97	1319
15-16	241	1131	83	1455
16-17	240	1179	76	1495
17-18	230	1185	71	1486
TOTAL	1194	6701	567	8462

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	168	1076	151	1395
8-9	198	980	198	1376
9-10	149	814	211	1174
15-16	166	1008	219	1393
16-17	150	1032	220	1402
17-18	160	1086	204	1450
TOTAL	991	5996	1203	8190

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2754	75	8	47	1
2724	64	6	50	4
2493	84	0	65	2
2848	136	12	65	5
2897	100	4	67	8
2936	90	6	92	4
16652	549	36	386	24

Location: Tyrone Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-007
 Date: 12/12/2018

Total

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	0	0	0	1	0	0	1	3	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	11	2	4	0	5	8	7	0	2	274	7	0	2	291	2	0	615
7:15 AM	17	4	6	0	13	14	6	0	0	353	13	0	9	320	2	1	758
7:30 AM	26	13	14	0	11	24	13	0	4	370	23	0	18	342	6	0	864
7:45 AM	36	16	19	0	11	30	10	0	0	379	25	0	10	326	5	0	867
8:00 AM	38	5	10	0	4	11	14	0	6	330	13	0	11	358	6	0	806
8:15 AM	13	4	6	0	7	8	4	0	3	335	9	0	6	331	4	0	730
8:30 AM	13	3	4	0	5	2	3	0	4	320	9	0	4	295	3	1	666
8:45 AM	12	5	8	0	8	8	6	0	1	315	5	0	7	305	4	0	684
9:00 AM	13	6	9	0	6	4	6	0	4	321	6	0	7	229	3	0	614
9:15 AM	10	5	7	0	7	5	7	0	3	338	6	0	4	289	3	0	684
9:30 AM	16	4	1	0	3	1	2	0	2	331	3	2	7	269	0	0	641
9:45 AM	11	4	5	0	6	4	5	0	7	332	10	0	3	289	5	3	684
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	216	71	93	0	86	119	83	0	36	3998	129	2	88	3644	43	5	8613
APPROACH %'s:	56.84%	18.58%	24.47%	0.00%	29.86%	41.32%	28.82%	0.00%	0.86%	95.99%	3.10%	0.05%	2.33%	96.40%	1.14%	0.13%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	117	38	49	0	39	79	43	0	10	1432	74	0	48	1346	19	1	3295
PEAK HR FACTOR:	0.770	0.594	0.645	0.000	0.750	0.658	0.768	0.000	0.417	0.945	0.740	0.000	0.667	0.940	0.792	0.250	0.950
	0.718				0.789				0.938				0.943				

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	0	1	0	0	0	1	0	0	1	3	0	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
3:00 PM	14	7	12	0	2	4	7	0	4	330	13	0	8	356	3	0	760
3:15 PM	18	7	10	0	4	6	9	0	2	371	9	0	2	304	3	0	745
3:30 PM	15	11	20	0	6	8	9	0	4	372	9	1	4	304	6	0	769
3:45 PM	16	15	6	0	5	5	7	0	4	411	8	0	10	317	8	0	812
4:00 PM	11	6	13	0	3	7	4	0	4	363	12	0	3	319	2	0	747
4:15 PM	17	13	11	0	3	7	5	0	6	384	18	1	9	282	1	0	757
4:30 PM	15	17	11	0	4	9	4	0	2	409	21	0	7	338	5	1	843
4:45 PM	15	16	14	0	7	7	5	0	7	387	23	0	11	393	3	1	889
5:00 PM	20	15	19	0	7	8	6	0	5	412	25	0	9	381	5	0	912
5:15 PM	9	15	18	0	6	8	6	0	4	371	17	0	10	363	4	0	831
5:30 PM	18	6	18	0	7	6	5	0	3	414	21	0	7	323	3	0	831
5:45 PM	21	7	16	0	4	11	7	0	4	436	15	1	5	336	4	0	867
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	189	135	168	0	58	86	74	0	49	4660	191	3	85	4016	47	2	9763
APPROACH %'s:	38.41%	27.44%	34.15%	0.00%	26.61%	39.45%	33.94%	0.00%	1.00%	95.04%	3.90%	0.06%	2.05%	96.77%	1.13%	0.05%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	59	63	62	0	24	32	21	0	18	1579	86	0	37	1475	17	2	3475
PEAK HR FACTOR:	0.738	0.926	0.816	0.000	0.857	0.889	0.875	0.000	0.643	0.958	0.860	0.000	0.841	0.938	0.850	0.500	0.953
	0.852				0.917				0.952				0.938				

Location: Tyrone Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-007
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Sherman Way				Sherman Way				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	12	2	5	0	5	9	7	0	2	283	7	0	2	301	2	0					637
7:15 AM	17	4	6	0	14	15	6	0	0	361	13	0	9	326	2	1					774
7:30 AM	26	14	14	0	11	24	13	0	4	379	24	0	18	347	6	0					880
7:45 AM	36	16	20	0	11	30	11	0	0	388	25	0	10	333	6	0					886
8:00 AM	39	5	10	0	4	11	14	0	6	342	13	0	11	367	7	0					829
8:15 AM	16	4	6	0	7	8	4	0	3	341	9	0	6	345	4	0					753
8:30 AM	14	3	4	0	5	2	3	0	4	336	9	0	4	309	3	1					697
8:45 AM	12	5	8	0	8	8	6	0	1	322	5	0	7	318	4	0					704
9:00 AM	13	6	10	0	6	4	7	0	4	333	6	0	7	232	3	0					631
9:15 AM	10	5	7	0	8	5	7	0	3	348	6	0	4	305	3	0					711
9:30 AM	16	4	1	0	4	1	2	0	2	349	3	2	8	274	0	0					666
9:45 AM	11	4	5	0	6	4	5	0	7	348	10	0	3	299	5	3					710
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	56,92%	18,46%	24,62%	0,00%	30,17%	41,02%	28,81%	0,00%	0,84%	96,09%	3,02%	0,05%	2,28%	96,43%	1,16%	0,13%					8878
PEAK HR :	07:15 AM - 08:15 AM																TOTAL				
PEAK HR VOL :	118	39	50	0	40	80	44	0	10	1470	75	0	48	1373	21	1					3369
PEAK HR FACTOR :	0,756	0,609	0,625	0,000	0,714	0,667	0,786	0,000	0,417	0,947	0,750	0,000	0,667	0,935	0,750	0,250					0,951
	0,719				0,788				0,941				0,937								

NS/EW Streets:	Tyrone Ave				Tyrone Ave				Sherman Way				Sherman Way				TOTAL				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
3:00 PM	14	7	12	0	2	4	7	0	4	341	13	0	8	362	3	0					777
3:15 PM	19	7	10	0	4	6	10	0	2	377	9	0	2	311	3	0					760
3:30 PM	15	11	21	0	6	8	9	0	4	376	10	1	4	313	6	0					784
3:45 PM	16	15	7	0	6	5	9	0	4	424	8	0	11	324	8	0					837
4:00 PM	11	6	14	0	3	7	4	0	4	372	12	0	3	324	2	0					762
4:15 PM	17	13	11	0	3	7	5	0	6	394	18	1	9	287	1	0					772
4:30 PM	15	17	11	0	5	9	4	0	2	416	22	0	7	344	6	1					859
4:45 PM	15	16	14	0	7	7	5	0	8	392	23	0	11	397	3	1					899
5:00 PM	20	15	19	0	7	8	6	0	5	414	25	0	9	388	5	0					921
5:15 PM	9	15	18	0	6	8	6	0	4	375	17	0	10	370	4	0					842
5:30 PM	18	6	18	0	7	6	5	0	3	416	21	0	7	327	3	0					837
5:45 PM	21	7	16	0	4	11	7	0	4	441	15	1	5	340	4	0					876
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					TOTAL
APPROACH %'s :	38,31%	27,22%	34,48%	0,00%	26,91%	38,57%	34,53%	0,00%	1,00%	95,06%	3,87%	0,06%	2,04%	96,78%	1,14%	0,05%					9926
PEAK HR :	04:30 PM - 05:30 PM																TOTAL				
PEAK HR VOL :	59	63	62	0	25	32	21	0	19	1597	87	0	37	1499	18	2					3521
PEAK HR FACTOR :	0,74	0,926	0,816	0,000	0,893	0,889	0,875	0,000	0,594	0,960	0,870	0,000	0,841	0,944	0,750	0,500					0,956
	0,852				0,929				0,959				0,944								



City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Tyrone Ave

East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	18	11	313	270
BUSES	3	2	20	26
BUSES	0	0	51	48

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	70	7.45	50	7.45	395	7.45	366	8.00
PM PK 15 MIN	54	17.00	23	15.30	452	17.45	402	16.45
AM PK HOUR	201	7.15	158	7.15	1476	7.15	1383	7.30
PM PK HOUR	184	16.30	81	17.00	1716	17.00	1508	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	88	34	41	163
8-9	69	17	28	114
9-10	50	19	21	90
15-16	62	40	45	147
16-17	58	52	48	158
17-18	68	43	71	182
TOTAL	395	205	254	854

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	39	74	35	148
8-9	24	29	27	80
9-10	20	14	19	53
15-16	16	23	31	70
16-17	16	30	18	64
17-18	24	33	24	81
TOTAL	139	203	154	496

TOTAL

N-S
311
194
143
217
222
263
1350

XING S/L

Ped	Sch
34	16
26	0
27	1
27	8
19	4
25	2
158	31

XING N/L

Ped	Sch
17	13
14	0
9	0
20	6
15	6
16	6
91	31

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	6	1336	67	1409
8-9	14	1253	36	1303
9-10	18	1267	25	1310
15-16	15	1443	38	1496
16-17	19	1506	73	1598
17-18	17	1621	78	1716
TOTAL	89	8426	317	8832

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	40	1251	14	1305
8-9	29	1238	16	1283
9-10	23	1037	11	1071
15-16	23	1250	20	1293
16-17	32	1310	10	1352
17-18	31	1381	16	1428
TOTAL	178	7467	87	7732

TOTAL

E-W
2714
2586
2381
2789
2950
3144
16564

XING W/L

Ped	Sch
16	3
11	2
15	0
13	12
12	4
13	4
80	25

XING E/L

Ped	Sch
9	3
5	1
4	1
5	2
7	5
14	2
44	14



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET: Tyrone Ave

North/South: _____
 East/West: Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	32	23	527	458
BIKES	3	2	19	10
BUSES	0	0	82	79

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AMPK 15 MIN</i>	72	7.45	52	7.45	418	7.45	387	8.00
<i>PMPK 15 MIN</i>	43	17.00	23	15.30	463	17.45	414	16.45
<i>AMPK HOUR</i>	207	7.15	164	7.15	1568	7.15	1479	7.30
<i>PMPK HOUR</i>	184	16.30	81	17.00	1753	17.00	1569	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	91	36	45	172
8-9	81	17	28	126
9-10	50	19	23	92
15-16	64	40	50	154
16-17	58	52	50	160
17-18	68	43	71	182
TOTAL	412	207	267	886

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	41	78	37	156
8-9	24	29	27	80
9-10	24	14	21	59
15-16	18	23	35	76
16-17	18	30	18	66
17-18	24	33	24	81
TOTAL	149	207	162	518

TOTAL

XING S/L

XING N/L

Hours	N-S	Ped	Sch	Ped	Sch
7-8	328	34	16	17	13
8-9	206	26	0	14	0
9-10	151	27	1	9	0
15-16	230	27	8	20	6
16-17	226	19	4	15	6
17-18	263	25	2	16	6
TOTAL	1404	158	31	91	31

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	6	1426	69	1501
8-9	14	1353	36	1403
9-10	16	1389	25	1430
15-16	14	1533	40	1587
16-17	20	1590	75	1685
17-18	16	1659	78	1753
TOTAL	86	8950	323	9359

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	39	1322	16	1377
8-9	28	1352	18	1398
9-10	22	1120	11	1153
15-16	25	1323	20	1368
16-17	30	1368	12	1410
17-18	31	1437	16	1484
TOTAL	175	7922	93	8190

TOTAL

XING W/L

XING E/L

Hours	E-W	Ped	Sch	Ped	Sch
7-8	2878	16	3	9	3
8-9	2801	11	2	5	1
9-10	2583	15	0	4	1
15-16	2955	13	12	5	2
16-17	3095	12	4	7	5
17-18	3237	13	4	14	2
TOTAL	17549	80	25	44	14

Location: Hazeltine Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-008
 Date: 12/12/2018

Total

NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	TOTAL
7:00 AM	11	34	13	0	23	81	21	0	6	253	34	0	49	250	29	0	804
7:15 AM	21	56	29	0	34	93	12	0	10	344	32	0	71	293	27	0	1022
7:30 AM	17	64	33	0	33	101	9	0	6	327	33	0	67	318	35	0	1043
7:45 AM	29	73	49	0	27	87	7	0	10	375	25	0	75	307	31	0	1095
8:00 AM	34	62	58	0	19	58	8	0	12	294	41	0	63	327	44	0	1020
8:15 AM	30	59	45	0	14	70	8	0	10	306	31	0	46	289	34	0	942
8:30 AM	27	52	26	0	22	46	9	0	5	281	28	0	47	274	22	0	839
8:45 AM	29	48	26	0	12	72	12	0	15	272	43	0	42	265	24	0	860
9:00 AM	34	41	30	0	25	45	7	0	12	293	34	0	46	213	22	0	802
9:15 AM	33	38	32	0	21	44	7	0	2	315	42	0	41	241	26	0	842
9:30 AM	32	45	34	0	21	49	8	0	4	303	31	0	41	236	21	0	825
9:45 AM	31	37	36	0	33	73	11	0	8	304	31	0	41	265	17	0	887
TOTAL VOLUMES:	NL 328	NT 609	NR 411	NU 0	SL 284	ST 819	SR 119	SU 0	EL 100	ET 3667	ER 405	EU 0	WL 629	WT 3278	WR 332	WU 0	TOTAL 10981
APPROACH %'s:	24.33%	45.18%	30.49%	0.00%	23.24%	67.02%	9.74%	0.00%	2.40%	87.90%	9.71%	0.00%	14.84%	77.33%	7.83%	0.00%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	101	255	169	0	113	339	36	0	38	1340	131	0	276	1245	137	0	4180
PEAK HR FACTOR:	0.743	0.873	0.728	0.000	0.831	0.839	0.750	0.000	0.792	0.893	0.799	0.000	0.920	0.952	0.778	0.000	0.954
	0.852				0.853				0.920				0.955				

NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	TOTAL
3:00 PM	41	66	32	0	25	45	6	1	15	299	34	0	32	304	27	0	927
3:15 PM	31	82	51	0	29	49	8	0	7	318	26	0	27	275	23	0	926
3:30 PM	45	89	43	0	19	47	10	0	15	352	36	0	27	266	27	0	976
3:45 PM	38	84	42	0	27	49	10	0	16	354	35	0	39	293	28	0	1015
4:00 PM	29	92	49	0	26	67	14	0	9	332	36	0	37	291	29	0	1011
4:15 PM	41	91	53	0	19	55	7	0	16	331	30	0	38	250	37	0	968
4:30 PM	43	76	54	0	13	59	8	0	10	364	42	0	31	305	28	0	1033
4:45 PM	50	83	45	0	24	59	9	0	15	358	25	0	36	363	26	0	1093
5:00 PM	52	91	63	0	30	59	11	0	11	402	31	0	27	329	29	0	1135
5:15 PM	46	103	52	0	28	71	10	0	9	357	40	0	35	339	31	0	1121
5:30 PM	43	84	62	0	25	73	14	0	15	394	25	0	31	305	29	0	1100
5:45 PM	42	79	50	0	26	45	8	0	10	378	39	0	38	319	30	0	1064
TOTAL VOLUMES:	NL 501	NT 1020	NR 596	NU 0	SL 291	ST 678	SR 115	SU 1	EL 148	ET 4239	ER 399	EU 0	WL 398	WT 3639	WR 344	WU 0	TOTAL 12369
APPROACH %'s:	23.67%	48.18%	28.15%	0.00%	26.82%	62.49%	10.60%	0.09%	3.09%	88.57%	8.34%	0.00%	9.08%	83.06%	7.85%	0.00%	
PEAK HR:	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL:	191	361	222	0	107	262	44	0	50	1511	121	0	129	1336	115	0	4449
PEAK HR FACTOR:	0.918	0.876	0.881	0.000	0.892	0.897	0.786	0.000	0.833	0.940	0.756	0.000	0.896	0.920	0.927	0.000	0.980
	0.939				0.922				0.947				0.929				

Location: Hazeltine Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-008
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Sherman Way				Sherman Way				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
7:00 AM	11	34	13	0	24	81	21	0	6	259	35	0	50	261	29	0				
7:15 AM	22	57	31	0	34	93	12	0	10	351	35	0	73	300	27	0				
7:30 AM	18	64	34	0	34	101	9	0	6	337	34	0	68	321	35	0				
7:45 AM	30	73	50	0	27	89	7	0	11	383	27	0	76	314	32	0				
8:00 AM	34	63	58	0	20	59	8	0	12	301	44	0	64	338	44	0				
8:15 AM	31	60	46	0	14	71	8	0	10	315	31	0	47	301	35	0				
8:30 AM	28	52	26	0	22	47	9	0	5	292	29	0	49	287	23	0				
8:45 AM	30	48	26	0	12	73	13	0	16	280	44	0	43	278	25	0				
9:00 AM	35	41	30	0	26	45	7	0	13	303	35	0	51	216	22	0				
9:15 AM	34	39	33	0	22	45	7	0	2	326	42	0	41	256	26	0				
9:30 AM	33	47	35	0	23	51	8	0	4	318	35	0	41	241	21	0				
9:45 AM	32	37	36	0	38	77	11	0	8	321	32	0	42	274	18	0				
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
APPROACH %'s :	338	615	418	0	296	832	120	0	645	3786	423	0	645	3387	337	0				
	24,65%	44,86%	30,49%	0,00%	23,72%	66,67%	9,62%	0,00%	2,39%	87,80%	9,81%	0,00%	14,76%	77,52%	7,71%	0,00%				
PEAK HR :	07:15 AM - 08:15 AM																TOTAL			
PEAK HR VOL :	104	257	173	0	115	342	36	0	39	1372	140	0	281	1273	138	0				
PEAK HR FACTOR :	0,765	0,880	0,746	0,000	0,846	0,847	0,750	0,000	0,813	0,896	0,795	0,000	0,924	0,942	0,784	0,000				
	0,861				0,856				0,921				0,948				0,954			

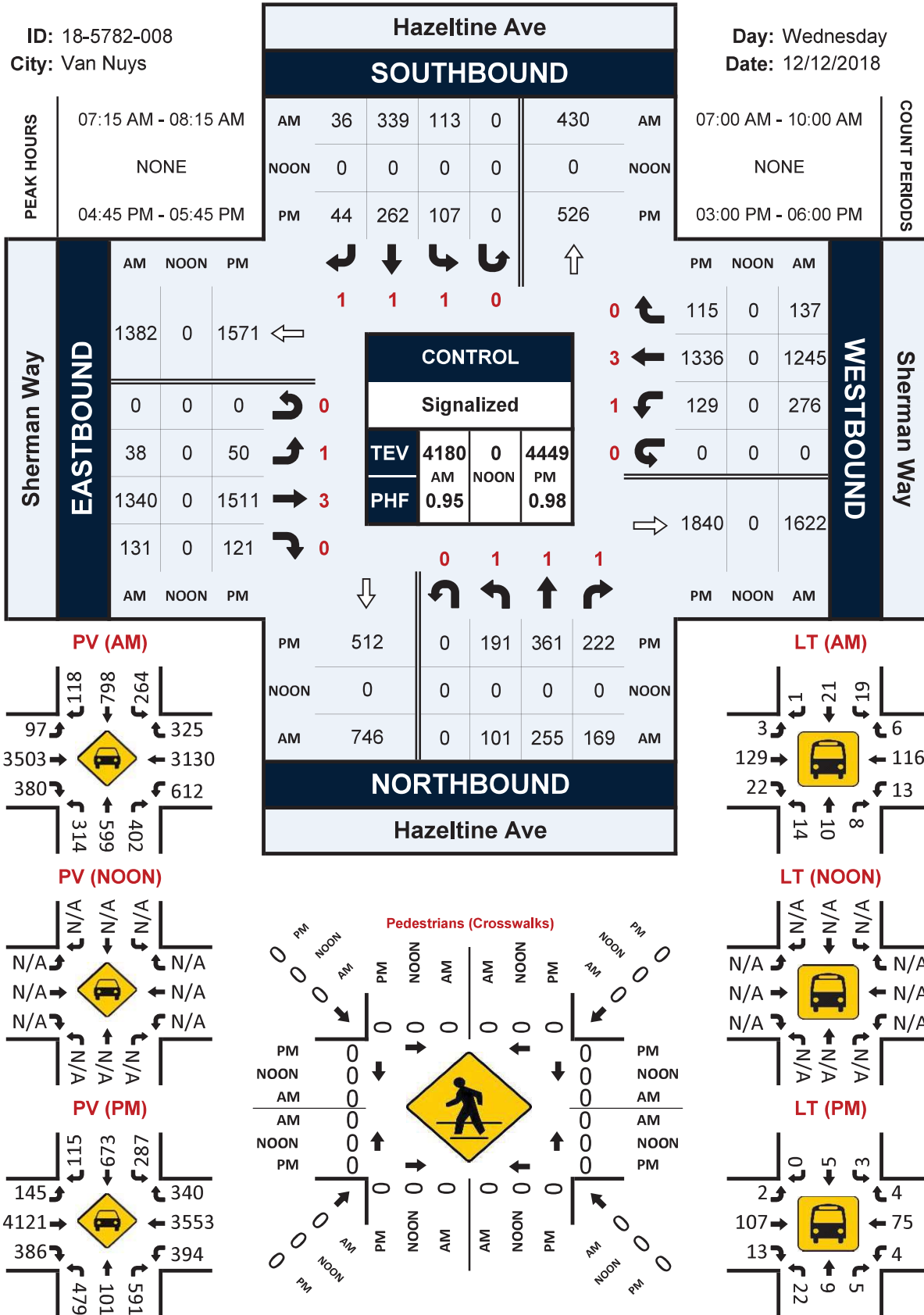
NS/EW Streets:	Hazeltine Ave				Hazeltine Ave				Sherman Way				Sherman Way				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
3:00 PM	43	66	33	0	25	46	6	1	15	310	35	0	32	308	28	0				
3:15 PM	32	82	52	0	30	49	8	0	7	324	28	0	28	281	24	0				
3:30 PM	46	90	43	0	19	47	10	0	15	356	37	0	27	274	27	0				
3:45 PM	39	85	43	0	27	50	10	0	17	366	36	0	40	299	28	0				
4:00 PM	30	94	49	0	27	67	14	0	9	339	36	0	37	295	29	0				
4:15 PM	42	92	53	0	19	56	7	0	17	339	31	0	39	254	37	0				
4:30 PM	43	76	54	0	14	59	8	0	10	373	42	0	31	311	29	0				
4:45 PM	51	83	46	0	24	59	9	0	15	363	26	0	36	367	26	0				
5:00 PM	53	91	63	0	33	60	11	0	11	405	31	0	27	335	30	0				
5:15 PM	47	103	52	0	28	71	10	0	9	361	41	0	35	343	31	0				
5:30 PM	45	85	63	0	25	73	14	0	16	395	25	0	31	307	29	0				
5:45 PM	43	79	50	0	26	46	8	0	10	383	40	0	38	323	30	0				
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
APPROACH %'s :	514	1026	601	0	297	683	115	1	151	4314	408	0	401	3697	348	0				
	24,01%	47,92%	28,07%	0,00%	27,10%	62,32%	10,49%	0,09%	3,10%	88,53%	8,37%	0,00%	9,02%	83,15%	7,83%	0,00%				
PEAK HR :	04:45 PM - 05:45 PM																TOTAL			
PEAK HR VOL :	196	362	224	0	110	263	44	0	51	1524	123	0	129	1352	116	0				
PEAK HR FACTOR :	0,92	0,879	0,889	0,000	0,833	0,901	0,786	0,000	0,797	0,941	0,750	0,000	0,896	0,921	0,935	0,000				
	0,944				0,931				0,950				0,931				0,977			

Hazeltine Ave & Sherman Way

Peak Hour Turning Movement Count

ID: 18-5782-008
City: Van Nuys

Day: Wednesday
Date: 12/12/2018





City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Hazeltine Ave

East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chckrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	70	52	326	266
BUSES	5	6	23	31
BUSES	19	0	51	29

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AM PK 15 MIN</i>	152	8.00	142	7.30	399	7.45	423	8.00
<i>PM PK 15 MIN</i>	205	17.00	112	17.30	439	17.00	419	16.45
<i>AM PK HOUR</i>	546	7.30	523	7.00	1466	7.15	1619	7.15
<i>PM PK HOUR</i>	766	16.45	411	16.45	1697	17.00	1563	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	77	225	118	420
8-9	118	218	154	490
9-10	128	156	130	414
15-16	150	317	165	632
16-17	163	337	200	700
17-18	176	356	226	758
TOTAL	812	1609	993	3414

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	115	359	49	523
8-9	65	240	36	341
9-10	84	199	33	316
15-16	100	188	34	322
16-17	80	239	38	357
17-18	108	246	43	397
TOTAL	552	1471	233	2256

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
943	86	86	41	24
831	84	48	22	3
730	97	22	24	2
954	38	6	27	10
1057	37	11	26	8
1155	35	8	17	2
5670	377	181	157	49

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	31	1264	116	1411
8-9	41	1108	140	1289
9-10	25	1161	135	1321
15-16	52	1281	128	1461
16-17	49	1348	133	1530
17-18	44	1518	135	1697
TOTAL	242	7680	787	8709

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	256	1138	121	1515
8-9	192	1106	120	1418
9-10	166	916	84	1166
15-16	123	1111	103	1337
16-17	140	1187	119	1446
17-18	131	1277	118	1526
TOTAL	1008	6735	665	8408

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2926	44	13	78	73
2707	26	8	46	15
2487	25	6	66	4
2798	16	13	12	3
2976	32	5	22	9
3223	15	3	18	5
17117	158	48	242	109



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Hazeltine Ave

East/West Sherman Way

Day: Wednesday **Date:** 12/12/2018 **Weather:** SUNNY

Hours: _____ **Chekr:** NDS

School Day: YES **District:** _____ **I/S CODE** _____

	N/B		S/B		E/B		W/B	
DUAL-WHEELED	117		89		553		461	
BIKES	5		6		22		13	
BUSES	35		0		91		50	
	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AMPK 15 MIN</i>	155	8.00	144	7.30	426	7.45	448	8.00
<i>PMPK 15 MIN</i>	183	17.00	112	17.30	449	17.00	429	16.45
<i>AMPK HOUR</i>	568	7.30	532	7.00	1566	7.15	1702	7.15
<i>PMPK HOUR</i>	789	16.45	417	16.45	1741	17.00	1605	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	86	228	128	442
8-9	129	223	156	508
9-10	140	164	134	438
15-16	166	323	171	660
16-17	174	345	202	721
17-18	192	358	228	778
TOTAL	887	1641	1019	3547

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	119	364	49	532
8-9	68	250	38	356
9-10	109	218	33	360
15-16	101	192	34	327
16-17	84	241	38	363
17-18	112	250	43	405
TOTAL	593	1515	235	2343

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
974	86	86	41	24
864	84	48	22	3
798	97	22	24	2
987	38	6	27	10
1084	37	11	26	8
1183	35	8	17	2
5890	377	181	157	49

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	33	1340	137	1510
8-9	43	1197	154	1394
9-10	27	1276	150	1453
15-16	54	1364	144	1562
16-17	51	1425	140	1616
17-18	46	1553	142	1741
TOTAL	254	8155	867	9276

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	267	1206	123	1596
8-9	203	1213	127	1543
9-10	175	992	87	1254
15-16	127	1171	107	1405
16-17	143	1236	121	1500
17-18	131	1316	120	1567
TOTAL	1046	7134	685	8865

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
3106	44	13	78	73
2937	26	8	46	15
2707	25	6	66	4
2967	16	13	12	3
3116	32	5	22	9
3308	15	3	18	5
18141	158	48	242	109

Location: Woodman Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-009
 Date: 12/12/2018

Total

NS/EW Streets:	Woodman Ave				Woodman Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	3 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
7:00 AM	17	106	23	0	56	282	105	0	39	242	32	0	37	221	18	0	
7:15 AM	33	129	51	0	67	345	118	0	48	346	24	0	31	217	23	0	
7:30 AM	37	169	40	0	68	329	145	1	65	325	25	0	31	230	23	0	
7:45 AM	52	178	39	0	66	255	145	0	69	329	34	0	24	241	31	0	
8:00 AM	37	182	52	0	62	258	123	1	57	283	26	0	31	231	46	0	
8:15 AM	28	113	35	0	39	227	100	0	61	287	27	0	27	223	40	0	
8:30 AM	37	129	39	0	59	252	95	1	57	250	31	0	26	211	28	0	
8:45 AM	32	112	42	0	60	312	90	0	53	233	33	0	44	208	39	0	
9:00 AM	34	103	34	0	53	219	63	0	43	262	42	0	33	186	34	0	
9:15 AM	45	150	35	0	63	232	72	0	64	264	29	0	37	200	24	0	
9:30 AM	27	131	38	1	67	230	66	0	50	251	27	0	41	192	31	0	
9:45 AM	36	155	55	0	57	244	81	0	52	306	36	0	43	186	44	0	
TOTAL VOLUMES:	NL 415	NT 1657	NR 483	NU 1	SL 717	ST 3185	SR 1203	SU 3	EL 658	ET 3378	ER 366	EU 0	WL 405	WT 2546	WR 381	WU 0	
APPROACH %'s:	16.24%	64.83%	18.90%	0.04%	14.04%	62.35%	23.55%	0.06%	14.95%	76.74%	8.31%	0.00%	12.15%	76.41%	11.43%	0.00%	
PEAK HR:	07:15 AM - 08:15 AM																
PEAK HR VOL:	159	658	182	0	263	1187	531	2	239	1283	109	0	117	919	123	0	
PEAK HR FACTOR:	0,764	0,904	0,875	0,000	0,967	0,860	0,916	0,500	0,866	0,927	0,801	0,000	0,944	0,944	0,953	0,668	0,000
	0,922				0,913				0,944				0,941				0,970

NS/EW Streets:	Woodman Ave				Woodman Ave				Sherman Way				Sherman Way				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1 NL	3 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	3 ET	0 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
3:00 PM	53	212	40	0	66	202	77	0	59	276	37	0	34	231	58	0	
3:15 PM	34	227	35	0	51	198	86	0	65	248	31	0	36	224	64	0	
3:30 PM	34	202	40	0	51	190	93	0	81	293	38	0	33	203	78	0	
3:45 PM	37	239	39	0	51	196	90	0	72	311	32	0	32	232	57	0	
4:00 PM	38	231	34	0	44	206	86	0	81	260	29	0	46	231	68	0	
4:15 PM	34	234	37	0	51	201	76	0	77	265	29	0	41	221	62	0	
4:30 PM	39	261	42	0	51	211	95	1	91	264	52	0	29	260	42	0	
4:45 PM	30	234	35	0	50	209	112	0	71	295	40	0	51	286	39	0	
5:00 PM	34	220	32	0	59	212	90	0	75	312	31	0	45	261	44	0	
5:15 PM	35	223	40	0	47	200	94	0	89	308	31	0	40	253	60	0	
5:30 PM	43	238	37	0	43	199	96	0	89	306	38	0	45	250	56	0	
5:45 PM	51	194	39	0	49	199	85	0	95	305	34	0	40	259	45	0	
TOTAL VOLUMES:	NL 462	NT 2715	NR 450	NU 0	SL 613	ST 2423	SR 1080	SU 1	EL 945	ET 3443	ER 422	EU 0	WL 472	WT 2911	WR 673	WU 0	
APPROACH %'s:	12.74%	74.86%	12.41%	0.00%	14.89%	58.85%	26.23%	0.02%	19.65%	71.58%	8.77%	0.00%	11.64%	71.77%	16.59%	0.00%	
PEAK HR:	04:45 PM - 05:45 PM																
PEAK HR VOL:	142	915	144	0	199	820	392	0	324	1221	140	0	181	1050	199	0	
PEAK HR FACTOR:	0,826	0,961	0,900	0,000	0,843	0,967	0,875	0,000	0,910	0,978	0,875	0,000	0,887	0,918	0,829	0,000	
	0,944				0,951				0,973				0,951				0,986

Location: Woodman Ave & Sherman Way
 City: Van Nuys
 Control: Signalized

Project ID: 18-5782-009
 Date: 12/12/2018

Totals PCE

NS/EW Streets:	Woodman Ave				Woodman Ave				Sherman Way				Sherman Way				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
7:00 AM	17	107	23	0	58	287	108	0	39	248	34	0	37	227	20	0				
7:15 AM	33	133	51	0	67	348	121	0	50	352	25	0	33	222	24	0				
7:30 AM	37	175	41	0	69	333	146	1	67	330	25	0	32	235	24	0				
7:45 AM	52	181	40	0	69	258	147	0	69	338	35	0	24	246	33	0				
8:00 AM	38	183	52	0	64	264	128	1	59	290	26	0	32	240	47	0				
8:15 AM	28	116	36	0	42	229	103	0	61	297	27	0	30	236	40	0				
8:30 AM	37	134	40	0	63	259	99	1	58	259	32	0	26	220	29	0				
8:45 AM	33	113	44	0	61	317	93	0	54	243	35	0	45	222	39	0				
9:00 AM	36	108	34	0	54	226	65	0	45	268	46	0	35	189	36	0				
9:15 AM	46	153	35	0	64	234	75	0	66	275	30	0	39	211	24	0				
9:30 AM	28	135	39	1	68	234	66	0	51	269	28	0	42	197	32	0				
9:45 AM	37	158	57	0	58	248	85	0	52	320	38	0	45	192	45	0				
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
APPROACH %'s :	422	1696	492	1	737	3237	1236	3	671	3489	381	0	420	2637	393	0				
	16,16%	64,96%	18,84%	0,04%	14,14%	62,09%	23,71%	0,06%	14,78%	76,83%	8,39%	0,00%	12,17%	76,43%	11,39%	0,00%				
PEAK HR :	07:15 AM - 08:15 AM																			
PEAK HR VOL :	160	672	184	0	269	1203	542	2	245	1310	111	0	121	943	128	0				
PEAK HR FACTOR :	0,769	0,918	0,885	0,000	0,975	0,864	0,922	0,500	0,888	0,930	0,793	0,000	0,917	0,958	0,681	0,000				
	0,930				0,918				0,942				0,934				0,972			

NS/EW Streets:	Woodman Ave				Woodman Ave				Sherman Way				Sherman Way				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
PM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
3:00 PM	53	214	41	0	67	206	78	0	62	284	38	0	34	235	58	0				
3:15 PM	34	230	36	0	53	200	90	0	67	253	32	0	37	228	67	0				
3:30 PM	34	210	40	0	51	191	94	0	82	297	38	0	34	209	79	0				
3:45 PM	37	241	40	0	51	201	93	0	75	319	32	0	33	236	57	0				
4:00 PM	38	233	34	0	47	208	86	0	82	267	29	0	46	235	70	0				
4:15 PM	34	239	38	0	52	202	78	0	80	271	29	0	41	225	63	0				
4:30 PM	40	264	43	0	52	214	96	1	96	269	52	0	29	264	42	0				
4:45 PM	30	235	38	0	50	211	112	0	72	299	40	0	51	289	40	0				
5:00 PM	34	222	33	0	59	214	93	0	75	317	32	0	46	267	44	0				
5:15 PM	35	224	41	0	47	200	94	0	91	310	31	0	40	256	61	0				
5:30 PM	43	241	38	0	43	200	97	0	89	307	38	0	45	253	57	0				
5:45 PM	51	195	39	0	51	200	87	0	98	308	34	0	40	261	45	0				
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
APPROACH %'s :	463	2748	461	0	623	2447	1098	1	969	3501	425	0	476	2958	683	0				
	12,61%	74,84%	12,55%	0,00%	14,94%	58,70%	26,34%	0,02%	19,80%	71,52%	8,68%	0,00%	11,56%	71,85%	16,59%	0,00%				
PEAK HR :	04:45 PM - 05:45 PM																			
PEAK HR VOL :	142	922	150	0	199	825	396	0	327	1233	141	0	182	1065	202	0				
PEAK HR FACTOR :	0,83	0,956	0,915	0,000	0,843	0,964	0,884	0,000	0,898	0,972	0,881	0,000	0,892	0,921	0,828	0,000				
	0,943				0,952				0,980				0,953				0,986			



City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South Woodman Ave

East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: Yes I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED BIKES	130	194	317	239
BUSES	16	44	23	24
BUSES	8	9	32	29

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AM PK 15 MIN</i>	269	8.00	538	7.30	421	7.45	297	8.00
<i>PM PK 15 MIN</i>	336	16.30	369	16.45	431	17.30	369	16.45
<i>AM PK HOUR</i>	982	7.15	1950	7.00	1591	7.15	1140	7.30
<i>PM PK HOUR</i>	1246	15.45	1421	16.30	1701	17.00	1406	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	139	568	151	858
8-9	132	527	161	820
9-10	135	525	158	818
15-16	158	869	150	1177
16-17	140	946	144	1230
17-18	163	864	144	1171
TOTAL	867	4299	908	6074

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	255	1192	503	1950
8-9	216	1024	387	1627
9-10	235	913	270	1418
15-16	216	775	339	1330
16-17	190	820	363	1373
17-18	198	806	360	1364
TOTAL	1310	5530	2222	9062

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2808	15	4	26	10
2447	21	1	24	8
2236	33	0	34	0
2507	30	2	54	6
2603	46	1	75	3
2535	46	0	53	3
15136	191	8	266	30

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	215	1212	111	1538
8-9	223	1010	114	1347
9-10	203	1023	129	1355
15-16	264	1097	135	1496
16-17	308	1056	150	1514
17-18	347	1221	133	1701
TOTAL	1560	6619	772	8951

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	119	885	91	1095
8-9	123	834	149	1106
9-10	149	737	128	1014
15-16	132	867	255	1254
16-17	167	979	206	1352
17-18	169	1007	202	1378
TOTAL	859	5309	1031	7199

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2633	18	6	34	5
2453	21	6	43	1
2369	26	1	24	1
2750	60	9	43	1
2866	58	2	55	5
3079	63	3	46	1
16150	246	27	245	14



City Of Los Angeles
 Department Of Transportation
 MANUAL TRAFFIC COUNT SUMMARY

STREET:
 North/South Woodman Ave
 East/West Sherman Way

Day: Wednesday Date: 12/12/2018 Weather: SUNNY

Hours: _____ Chekrs: NDS

School Day: YES District: _____ I/S CODE _____

	N/B	S/B	E/B	W/B
DUAL-WHEELED	230	351	541	418
BIKES	16	44	23	5
BUSES	16	18	54	50

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
<i>AMPK 15 MIN</i>	273	8.00	548	7.30	445	7.45	321	8.00
<i>PMPK 15 MIN</i>	320	16.30	375	16.45	434	17.30	380	16.45
<i>AMPK HOUR</i>	1020	7.15	2013	7.00	1675	7.15	1230	7.30
<i>PMPK HOUR</i>	1285	15.45	1446	16.30	1739	17.00	1457	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	139	602	155	896
8-9	136	548	172	856
9-10	147	556	165	868
15-16	158	897	157	1212
16-17	142	973	153	1268
17-18	163	884	151	1198
TOTAL	885	4460	953	6298

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	263	1228	522	2013
8-9	230	1073	423	1726
9-10	244	944	291	1479
15-16	222	800	355	1377
16-17	201	839	372	1412
17-18	200	818	371	1389
TOTAL	1360	5702	2334	9396

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
2909	15	4	26	10
2582	21	1	24	8
2347	33	0	34	0
2589	30	2	54	6
2680	46	1	75	3
2587	46	0	53	3
15694	191	8	266	30

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	225	1278	119	1622
8-9	232	1098	120	1450
9-10	214	1140	142	1496
15-16	286	1158	140	1584
16-17	330	1119	150	1599
17-18	353	1251	135	1739
TOTAL	1640	7044	806	9490

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	126	940	101	1167
8-9	133	927	155	1215
9-10	161	795	137	1093
15-16	138	917	261	1316
16-17	167	1021	215	1403
17-18	171	1045	207	1423
TOTAL	896	5645	1076	7617

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2789	18	6	34	5
2665	21	6	43	1
2589	26	1	24	1
2900	60	9	43	1
3002	58	2	55	5
3162	63	3	46	1
17107	246	27	245	14

APPENDIX C

LADOT CMA Worksheets

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: East-West Street:	Van Nuys Boulevard Saticoy Street	Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
			2018	2023	Peak Hour:	AM	0.54	Dudek	12/12/2018	Project: Mid Valley Water Facility								
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity	EXISTING CONDITION		EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	307	3	310	310	0	315	1	315	3	318	1	318	3	318	1	318
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	13	908	3	922	2	315	13	935	2	320	0	935	2	320
	Through-Right	1	23	23	0	23	0	24	1	24	0	24	0	24	0	24	1	24
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	11	11	0	11	11	0	11	1	11	0	11	1	11	0	11	1	11
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1153	477	495	54	1207	5	1189	2	492	54	1243	2	510	54	1243	2	510
	Through-Right	1	278	278	0	278	0	286	1	286	0	286	0	286	0	286	1	286
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left	482	254	254	0	482	0	495	1	261	0	495	1	261	0	495	1	261
	Left-Through	1	1	1	0	1	0	1	1	1	0	1	1	1	0	1	1	1
	Through	25	254	254	0	25	0	26	0	261	0	26	0	261	0	26	0	261
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right	481	174	185	14	495	185	0	494	1	179	14	508	1	190	14	508	1	190
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left	79	79	79	0	79	0	81	1	81	0	81	1	81	0	81	1	81
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	51	118	118	0	51	118	0	52	0	121	0	52	0	121	0	52	121
	Through-Right	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
Right	67	0	0	0	67	0	0	69	0	0	0	69	0	0	0	69	0	0
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES	North-South:	784	805	807	North-South:	805	807	North-South:	805	807	North-South:	805	807	North-South:	805	807	North-South:	805
	East-West:	372	372	382	East-West:	372	382	East-West:	382	382	East-West:	382	382	East-West:	382	382	East-West:	382
VOLUME/CAPACITY (V/C) RATIO: LEVEL OF SERVICE (LOS):	SUM:	1156	1177	1189	SUM:	1177	1189	SUM:	1189	1189	SUM:	1189	1189	SUM:	1210	1210	SUM:	1210
	0.811	0.826	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834	0.834
		0.711	0.726	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734	0.734
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

REMARKS:

Version: 11 Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.015** Δ v/c after mitigation: **0.015**
 Significant impacted? **NO** Fully mitigated? **NO**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Van Nuys Boulevard		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:										
	East-West Street:	Saticoy Street	No. of Phases	Projection Year:	2018	2023	PM	Peak Hour:	Reviewed by:	Dudek	12/12/2018	Project:									
1			3																		
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0																		
	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0																		
	ATSAC-1 or ATSAC+ATCS-2?		0																		
	Override Capacity		0																		
MOVEMENT		EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume			
NORTHBOUND	Left-Through	269	1	269	15	284	284	0	1	276	15	291	1	291	15	291	1	291			
	Through-Right	1455	2	495	61	1516	516	6	2	511	61	1562	2	531	61	1562	2	531			
	Right	31	0	31	0	31	31	0	0	32	0	32	0	32	0	32	0	32			
	Left-Through-Right		0						0					0				0			
	Left-Right		0						0					0				0			
SOUTHBOUND	Left-Through	31	1	31	0	31	31	0	1	32	0	32	1	32	0	32	1	32			
	Through-Right	1098	2	480	11	1109	484	4	2	494	11	1143	2	498	11	1143	2	498			
	Right	342	0	342	0	342	342	0	0	351	0	351	0	351	0	351	0	351			
	Left-Through-Right		0						0					0				0			
	Left-Right		0						0					0				0			
EASTBOUND	Left-Through	556	1	285	0	556	285	0	1	292	0	571	1	292	0	571	1	292			
	Through-Right	13	0	285	0	13	285	0	0	292	0	13	0	292	0	13	0	292			
	Right	320	1	51	3	323	39	0	1	53	3	332	1	41	3	332	1	41			
	Left-Through-Right		0						0					0				0			
	Left-Right		0						0					0				0			
WESTBOUND	Left-Through	31	1	31	0	31	31	0	1	32	0	32	1	32	0	32	1	32			
	Through-Right	114	0	197	0	114	197	0	0	202	0	117	0	202	0	117	0	202			
	Right	83	0	0	0	83	0	0	0	0	0	85	0	0	0	85	0	0			
	Left-Through-Right		0						0					0				0			
	Left-Right		0						0					0				0			
CRITICAL VOLUMES		North-South: 749	East-West: 482	SUM: 1231	North-South: 768	East-West: 482	SUM: 1250	North-South: 770	East-West: 494	SUM: 1264	North-South: 789	East-West: 494	SUM: 1283	North-South: 789	East-West: 494	SUM: 1283	North-South: 789	East-West: 494	SUM: 1283		
VOLUME/CAPACITY (V/C) RATIO:		0.864	0.764	C	0.877	0.777	C	0.887	0.787	C	0.900	0.800	D	0.900	0.800	D	0.900	0.800	D		
LEVEL OF SERVICE (LOS):				C			C			C			C			D			D		

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.013**
Significant impacted? **NO**

Δv/c after mitigation: **0.013**
Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Tyrone Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
	East-West Street:	No. of Phases	Volume	Lane Volume	Projection Year:	Peak Hour:	AM	0.54	Reviewed by:	12/12/2018	Project: Mid Valley Water Facility									
3	Valerio Street	Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity	NB--	2	NB--	2	NB--	2	NB--	NB--	2	NB--	2							
			SB--	0	SB--	0	SB--	0	SB--	0	0	SB--	0							
			EB--	0	EB--	0	EB--	0	EB--	0	0	EB--	0							
			WB--	2	WB--	2	WB--	2	WB--	2	2	WB--	2							
			0	0	0	0	0	0	0	0	0	0	0							
MOVEMENT			EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
NORTHBOUND	Left-Through Through Through-Right Right Left-Through-Right Left-Right	No. of Lanes	Volume	Lane Volume	Project Traffic	Total Volume	Lane Volume	No. of Lanes	Total Volume	Added Volume	Total Volume	Lane Volume	No. of Lanes	Total Volume	Added Volume	Total Volume	Lane Volume	No. of Lanes		
																			Lane Volume	No. of Lanes
	Left-Through	0	24	24	0	24	24	0	25	0	25	25	0	25	0	25	25	0	25	
	Through	0	32	72	15	47	87	0	33	0	33	74	0	48	15	48	89	0	89	
	Through-Right	0	16	0	0	16	0	0	16	0	16	0	0	0	0	16	0	0	0	
	Right	1	0	0	0	0	0	1	16	0	16	0	0	0	0	16	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND			EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Left-Through	0	3	3	1	4	4	0	3	0	3	3	0	4	1	4	4	0	4	
	Through	0	24	43	4	28	48	0	25	0	25	44	0	29	4	29	49	0	49	
	Through-Right	0	16	0	0	16	0	0	16	0	16	0	0	0	0	16	0	0	0	
	Right	1	0	0	0	0	0	1	16	0	16	0	0	0	0	16	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND			EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Left-Through	0	28	28	0	28	28	0	29	0	29	29	0	29	0	29	29	0	29	
	Through	0	308	412	0	308	412	0	316	0	316	423	0	316	0	316	423	0	423	
	Through-Right	0	76	0	0	76	0	0	78	0	78	0	0	0	0	78	0	0	0	
	Right	1	0	0	0	0	0	1	78	0	78	0	0	0	0	78	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND			EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Left-Through	0	40	40	0	40	40	0	41	0	41	41	0	41	0	41	41	0	41	
	Through	0	387	434	0	387	439	0	398	0	398	446	0	398	0	398	451	0	451	
	Through-Right	0	7	0	5	12	0	0	7	0	7	0	0	5	12	12	0	0	0	
	Right	1	0	0	0	0	0	1	7	0	7	0	0	0	0	7	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES			North-South:	75	91	77	93	North-South:	77	93	77	93	North-South:	77	93	77	93	North-South:	77	93
			East-West:	462	467	475	480	East-West:	475	480	475	480	East-West:	475	480	475	480	East-West:	475	480
			SUM:	537	558	552	573	SUM:	552	573	552	573	SUM:	552	573	552	573	SUM:	552	573
VOLUME/CAPACITY (V/C) RATIO:			0.358	0.372	0.368	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382	0.382
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.258	0.272	0.268	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282
LEVEL OF SERVICE (LOS):			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.014**
Significant impacted? **NO**

Δv/c after mitigation: **0.014**
Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Tyrone Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:											
	3	North-South Street:	East-West Street:	Valerio Street	2018	2023	0.54	PM	Dudek	12/12/2018	Project: Mid Valley Water Facility											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																						
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	25	0	25	0	26	0	26	0	26	0	26	0	26	0	26	0	26	0	26
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	38	0	87	3	41	0	39	0	42	3	93	0	42	3	93	0	42	3	93	0	93
	Right	24	0	0	0	24	0	25	0	25	0	0	0	25	0	0	0	25	0	25	0	0
SOUTHBOUND	Left-Through-Right	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	7	0	7	6	13	0	7	0	7	6	13	0	7	6	13	0	7	6	13	0	13
	Left-Through	19	0	43	18	37	0	20	0	38	18	68	0	38	18	68	0	38	18	68	0	68
EASTBOUND	Through-Right	17	0	0	0	17	0	17	0	17	0	0	0	17	0	0	0	17	0	17	0	0
	Right	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Through-Right	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left	21	0	21	0	21	0	22	0	22	0	22	0	22	0	22	0	22	0	22	0	22
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	369	0	427	0	369	0	379	0	379	0	439	0	379	0	439	0	379	0	439	0	439
	Right	37	0	0	0	37	0	38	0	38	0	0	0	38	0	0	0	38	0	38	0	0
WESTBOUND	Left-Through-Right	1	0	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	22	0	22	0	22	0	23	0	23	0	23	0	23	0	23	0	23	0	23	0	23
	Left-Through	409	0	444	0	409	0	420	0	420	0	456	0	420	0	457	0	420	0	457	0	457
WESTBOUND	Through-Right	13	0	0	1	14	0	13	0	14	1	0	0	14	0	0	0	14	0	14	0	0
	Right	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Through-Right	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South:		94	North-South:		103	North-South:		97	North-South:		106	North-South:		106	North-South:		106	North-South:		106
		East-West:		465	East-West:		466	East-West:		478	East-West:		479	East-West:		479	East-West:		479	East-West:		479
		SUM:		559	SUM:		569	SUM:		575	SUM:		585	SUM:		585	SUM:		585	SUM:		585
VOLUME/CAPACITY (V/C) RATIO:				0.373			0.379			0.383			0.390			0.390			0.390			0.390
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.273			0.279			0.283			0.290			0.290			0.290			0.290
LEVEL OF SERVICE (LOS):				A			A			A			A			A			A			A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.007**
Significant impacted? **NO**

Δv/c after mitigation: **0.007**
Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Hazeltime Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:											
	East-West Street:	Valerio Street	2018	2023	PM	Peak Hour:	0.54	PM	Reviewed by:	Dudek	12/12/2018	Project:										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																						
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	106	0	106	0	106	0	109	0	109	0	109	0	109	0	109	0	109	0	109	0	109
	Left-Through		1	106		106	1	109		109	1	109	1	109	1	109	1	109	1	109	1	109
	Through	245	0	245	8	253	0	252	0	252	8	260	0	260	8	260	0	260	8	260	0	260
	Through-Right	128	0	128	0	128	1	131	0	131	0	131	1	131	0	131	1	131	0	131	1	131
SOUTHBOUND	Left	122	0	122	36	158	0	125	0	125	36	161	0	161	36	161	0	161	36	161	0	161
	Left-Through		0	122		122	0	125		125	0	125	0	125	0	125	0	125	0	125	0	125
	Through	200	0	200	49	249	0	205	0	205	49	254	0	254	49	254	0	254	49	254	0	254
	Through-Right	8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0	8
EASTBOUND	Left	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2
	Left-Through		0	2		2	0	2		2	0	2	0	2	0	2	0	2	0	2	0	2
	Through	287	0	287	6	293	0	295	0	295	6	301	0	301	6	301	0	301	6	301	0	301
	Through-Right	109	0	109	0	109	0	112	0	112	0	112	0	112	0	112	0	112	0	112	0	112
WESTBOUND	Left	55	0	55	0	55	0	57	0	57	0	57	0	57	0	57	0	57	0	57	0	57
	Left-Through		0	55		55	0	57		57	0	57	0	57	0	57	0	57	0	57	0	57
	Through	340	0	340	1	341	0	349	0	349	1	350	0	350	1	350	0	350	1	350	0	350
	Through-Right	102	0	102	6	108	0	105	0	105	6	111	0	111	6	111	0	111	6	111	0	111
CRITICAL VOLUMES		North-South: 473	East-West: 499	SUM: 972	North-South: 521	East-West: 506	SUM: 1027	North-South: 486	East-West: 513	SUM: 999	North-South: 532	East-West: 520	SUM: 1052	North-South: 532	East-West: 520	SUM: 1052	North-South: 532	East-West: 520	SUM: 1052	North-South: 532	East-West: 520	SUM: 1052
VOLUME/CAPACITY (V/C) RATIO:		0.648	0.548	0.585	0.685	0.585	0.666	0.666	0.566	0.601	0.701	0.601	0.701	0.601	0.701	0.601	0.701	0.601	0.701	0.601	0.701	0.601
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.035**
 Significant impacted? **NO**

Δv/c after mitigation: **0.035**
 Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Woodman Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:											
	East-West Street:	Valerio Street	2018	2023	Projection Year:	Peak Hour:	AM	0.54	Reviewed by:	Dudek	12/12/2018	Project:										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																						
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume				
NORTHBOUND	Left	1	59	5	64	64	0	61	1	61	5	66	1	66	66	1	66	1	66			
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	1048	2	353	0	1048	0	1077	2	363	0	1077	2	363	1077	2	363	2	363	2	363	
	Through-Right	11	1	11	0	11	0	11	1	11	0	11	1	11	11	1	11	1	11	1	11	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	28	1	28	0	28	0	29	1	29	0	29	1	29	29	1	29	1	29	1	29	
	Left	1955	2	825	1	1956	0	2008	2	847	1	2009	2	858	2009	2	858	2	858	2	858	
	Left-Through	519	0	519	31	550	0	533	0	533	31	564	0	564	564	0	564	0	564	0	564	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	337	0	337	7	344	0	346	0	346	7	353	0	353	353	0	353	0	353	0	353	
	Left	22	0	442	0	22	0	23	0	454	0	23	0	462	23	0	462	0	462	0	462	
	Left-Through	83	0	0	1	84	0	85	0	0	1	86	0	0	86	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	37	0	37	0	37	0	38	0	38	0	38	0	38	38	0	38	0	38	0	38	
	Left	31	0	68	0	31	0	32	0	70	0	32	0	70	32	0	70	0	70	0	70	
	Left-Through	57	1	43	0	57	0	59	1	45	0	59	1	45	59	1	45	1	45	1	45	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES		North-South:	884	North-South:	899	North-South:	908	North-South:	924	North-South:	924	North-South:	924	North-South:	924	North-South:	924	North-South:	924	North-South:	924	
VOLUME/CAPACITY (V/C) RATIO:		East-West:	479	East-West:	487	East-West:	492	East-West:	500	East-West:	500	East-West:	500	East-West:	500	East-West:	500	East-West:	500	East-West:	500	
V/C LESS ATSAC/ATCS ADJUSTMENT:		SUM:	1363	SUM:	1386	SUM:	1400	SUM:	1424	SUM:	1424	SUM:	1424	SUM:	1424	SUM:	1424	SUM:	1424	SUM:	1424	
LEVEL OF SERVICE (LOS):			0.909		0.924		0.933		0.949		0.949		0.949		0.949		0.949		0.949		0.949	
REMARKS:			0.809		0.824		0.833		0.849		0.849		0.849		0.849		0.849		0.849		0.849	
			D		D		D		D		D		D		D		D		D		D	

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.016** Δv/c after mitigation: **0.016**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Woodman Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:				
	5	East-West Street:	Valerio Street	2018	2023	PM	0.54	Dudek	12/12/2018	Project:	Mid Valley Water Facility				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		No. of Phases		Projection Year:		Peak Hour:		Reviewed by:		FUTURE W/ PROJECT W/ MITIGATION					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		2		2023		PM		NB--		NB--					
ATSAC-1 or ATSAC+ATCS-2?		0		0		0		EB--		EB--					
Override Capacity		2		0		0		SB--		SB--					
		0		0		0		WB--		WB--					
		2		2		2		0		0					
		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION		EXISTING PLUS PROJECT		FUTURE CONDITION W/O PROJECT		FUTURE CONDITION W/ PROJECT		FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	56	1	56	1	57	57	0	58	1	59	1	59	1	59
	Left-Through														
	Through	1406	2	479	1	1407	479	0	1444	1	1445	1	1445	2	492
	Through-Right														
	Right	31	0	31	0	31	31	0	32	0	32	0	32	0	32
Left-Through-Right															
Left-Right															
SOUTHBOUND	Left	29	1	29	0	29	29	0	30	1	30	0	30	1	30
	Left-Through														
	Through	1348	2	575	0	1348	577	0	1385	2	1385	0	1385	2	593
	Through-Right														
	Right	378	0	378	6	384	384	0	388	0	388	6	394	0	394
Left-Through-Right															
Left-Right															
EASTBOUND	Left	362	0	362	36	398	398	0	372	0	372	36	408	0	408
	Left-Through														
	Through	23	0	440	0	23	482	0	453	0	24	0	24	0	495
	Through-Right														
	Right	55	0	0	6	61	0	0	57	0	63	6	63	0	0
Left-Through-Right															
Left-Right															
WESTBOUND	Left	26	0	26	0	26	26	0	27	0	27	0	27	0	27
	Left-Through														
	Through	51	0	77	0	51	77	0	52	0	52	0	52	0	79
	Through-Right														
	Right	100	1	86	0	100	86	0	103	1	103	0	103	1	88
Left-Through-Right															
Left-Right															
CRITICAL VOLUMES		North-South: 631 East-West: 466 SUM: 1097		North-South: 634 East-West: 508 SUM: 1142		North-South: 649 East-West: 480 SUM: 1129		North-South: 652 East-West: 522 SUM: 1174		North-South: 652 East-West: 522 SUM: 1174		North-South: 652 East-West: 522 SUM: 1174		North-South: 652 East-West: 522 SUM: 1174	
VOLUME/CAPACITY (V/C) RATIO:		0.731		0.761		0.753		0.783		0.783		0.783		0.783	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.631		0.661		0.653		0.683		0.683		0.683		0.683	
LEVEL OF SERVICE (LOS):		B		B		B		B		B		B		B	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.030**
Significant impacted? **NO**

Δv/c after mitigation: **0.030**
Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Van Nuys Boulevard		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:								
	East-West Street:	Sherman Way	2018	2023	Peak Hour:	AM	0.54	Dudek	Reviewed by:	12/12/2018	Project:	Mid Valley Water Facility							
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																			
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT			FUTURE CONDITION W/ PROJECT			FUTURE W/ PROJECT W/ MITIGATION						
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	189	2	104	0	189	18	212	2	117	0	212	2	117	0	212	2	117	
	Left-Through		0	0	8	722	2	735	0	284	8	743	0	286	8	743	0	286	
	Through		2	276					1	116			1	116			1	116	
	Through-Right		0	113	0	113	0	116	0	116	0	116	0	116	0	116	0	116	
	Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left-Through-Right		0	0					0	0			0	0			0	0	
	Left-Right		246	2	135	0	246	1	254	2	140	0	254	2	140	0	254	2	140
	Left-Through		1132	2	420	2	1134	4	1167	2	434	2	1169	2	435	2	1169	2	435
	Through		129	0	129	0	129	3	136	0	136	0	136	0	136	0	136	0	136
	Through-Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left-Through-Right		179	2	98	0	179	1	185	2	102	0	185	2	102	0	185	2	102
	Left-Through		1135	2	411	21	1156	21	1187	2	435	21	1208	2	442	21	1208	2	442
	Through		99	0	99	0	99	16	118	0	118	0	118	0	118	0	118	0	118
	Through-Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left-Through-Right		200	2	110	0	200	0	205	2	113	0	205	2	113	0	205	2	113
	Left-Through		1066	2	409	5	1071	25	1120	2	428	5	1125	2	430	5	1125	2	430
	Through		161	0	161	0	161	0	165	0	165	0	165	0	165	0	165	0	165
	Through-Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES			North-South: 524	North-South: 525	North-South: 551	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552	North-South: 552
VOLUME/CAPACITY (V/C) RATIO:			East-West: 521	East-West: 528	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548	East-West: 548
V/C LESS ATSAC/ATCS ADJUSTMENT:			SUM: 1045	SUM: 1053	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099	SUM: 1099
LEVEL OF SERVICE (LOS):			0.760	0.766	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799	0.799
REMARKS:			0.660	0.666	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699
Version: 1i Beta: 8/4/2011			PROJECT IMPACT			Change in v/c due to project: 0.006			Δv/c after mitigation: 0.006			Fully mitigated? N/A							

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Van Nuys Boulevard		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
	East-West Street:	Sherman Way	2018	2023	PM	Peak Hour:	0.54	Dudek	12/12/2018	Project:	Mid Valley Water Facility									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																				
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	2	2	129	0	235	26	267	2	147	0	267	2	147	0	267	2	147		
	Left-Through	0	0	0	2	1065	4	1096	0	421	2	1098	0	421	2	1098	0	421		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Right	0	0	162	0	162	0	166	0	166	0	166	0	166	0	166	0	166		
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
SOUTHBOUND	Left	2	2	222	0	403	1	415	2	228	0	415	2	228	0	415	2	228		
	Left-Through	0	0	0	9	894	4	913	0	364	9	922	0	364	9	922	0	364		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Through-Right	0	0	171	0	171	2	178	0	178	0	178	0	178	0	178	0	178		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
EASTBOUND	Left	2	2	129	0	235	3	244	2	134	0	244	2	134	0	244	2	134		
	Left-Through	0	0	0	4	1182	34	1244	0	450	4	1248	0	450	4	1248	0	450		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Through-Right	0	0	77	0	77	26	105	0	105	0	105	0	105	0	105	0	105		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
WESTBOUND	Left	2	2	88	0	160	0	164	2	90	0	164	2	90	0	164	2	90		
	Left-Through	0	0	0	24	1109	34	1149	0	451	24	1173	0	451	24	1173	0	451		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Through-Right	0	0	199	0	199	1	205	0	205	0	205	0	205	0	205	0	205		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
CRITICAL VOLUMES		North-South:		631	North-South:		North-South:		649		North-South:		649		North-South:		649			
		East-West:		565	East-West:		East-West:		585		East-West:		593		East-West:		593			
		SUM:		1187	SUM:		SUM:		1234		SUM:		1242		SUM:		1242			
VOLUME/CAPACITY (V/C) RATIO:				0.863					0.897				0.903				0.903			
LEVEL OF SERVICE (LOS):				0.763					0.797				0.803				0.803			
				C					C				D				D			

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.006** Δv/c after mitigation: **0.006**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Tyrone Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:						
	East-West Street:	Sherman Way	Projection Year:	2018	2023	Peak Hour:	AM	0.54	Reviewed by:	Dudek	12/12/2018	Project:					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																	
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT			FUTURE CONDITION W/ PROJECT			FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	Lane Volume	Added Volume	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	118	118	1	122	0	122	122	0	122	0	0	122	
	Left-Through	0	0	0	0	0	0	40	0	40	40	0	40	0	0	40	
	Through	39	0	0	39	207	0	40	0	40	40	0	40	0	0	213	
	Through-Right	0	0	0	0	0	0	51	0	51	51	0	51	0	0	0	
	Right	50	0	0	50	0	0	51	0	51	51	0	51	0	0	0	
SOUTHBOUND	Left-Through-Right	1	0	0	0	0	1	1	1	1	1	0	1	1	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	40	0	0	40	40	0	41	0	41	41	0	41	0	0	41	
	Left-Through	0	0	0	0	0	0	82	0	82	82	0	82	0	0	172	
	Through	80	0	0	80	168	0	82	0	82	82	0	82	0	0	172	
EASTBOUND	Through-Right	0	0	0	44	0	4	45	0	45	49	0	49	0	0	0	
	Right	44	0	0	44	0	4	45	0	45	49	0	49	0	0	0	
	Left-Through-Right	1	0	0	0	0	1	1	1	1	1	0	1	1	1	1	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	10	1	10	15	25	0	10	1	10	15	15	25	25	1	25	
WESTBOUND	Left-Through	1470	2	515	6	1476	7	1517	2	532	6	1523	1523	2	534	534	
	Through	75	0	75	0	75	1	78	0	78	0	78	78	0	78	78	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	75	0	75	0	75	1	78	0	78	0	78	78	0	78	78	
	Left-Through-Right	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES	Left	49	1	49	0	49	0	50	1	50	0	50	50	1	50	50	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1373	2	465	1	1374	7	1417	2	480	1	1418	1418	2	480	480	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	21	0	21	0	21	0	22	0	22	0	22	22	0	22	22	
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CRITICAL VOLUMES	North-South: 282 East-West: 564 SUM: 846	North-South: 286 East-West: 566 SUM: 852	North-South: 290 East-West: 582 SUM: 872	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878	North-South: 294 East-West: 584 SUM: 878
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):	0.564 0.464 A	0.568 0.468 A	0.581 0.481 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	0.585 0.485 A	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.004** Δv/c after mitigation: **0.004**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Tyrone Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
	East-West Street:		Sherman Way		Projection Year:		Peak Hour:		Reviewed by:		Project:									
7					2018		0.54		Dudek		12/12/2018									
Opposed Øing: N/S-1, E/W-2 or Both-3?			2		2		2		2		Mid Valley Water Facility									
Right Turns: FREE-1, NRTOR-2 or OLA-3?			0		0		0		0		0									
ATSAC-1 or ATSAC+ATCS-2?			0		0		0		0		0									
Override Capacity			0		0		0		0		0									
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Total Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	59	0	59	59	1	62	0	62	0	62	0	62	0	62	0	62	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	63	0	184	0	63	184	0	65	0	65	0	65	0	191	0	65	0	191	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	62	0	0	0	62	0	0	64	0	64	0	64	0	0	0	64	0	0	
Left-Through-Right	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	25	0	25	0	25	25	0	26	0	26	0	26	0	26	0	26	0	26	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	32	0	78	0	32	78	0	33	0	33	0	33	0	99	0	33	0	99	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	21	0	0	18	39	0	0	22	0	22	18	40	0	0	0	40	0	0	
Left-Through-Right	1	0	0	1	0	0	0	1	0	1	0	1	0	1	0	1	0	1		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
EASTBOUND	Left	19	1	19	3	22	22	0	20	1	20	3	23	1	23	1	23	1	23	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1597	2	561	1	1598	562	9	1650	2	580	1	1651	2	580	1	1651	2	580	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	87	0	87	0	87	87	1	90	0	90	0	90	0	90	0	90	0	90	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Left	39	1	39	0	39	39	0	40	1	40	0	40	1	40	0	40	1	40	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1499	2	506	7	1506	508	9	1549	2	522	7	1556	2	525	7	1556	2	525	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	18	0	18	0	18	18	0	18	0	18	0	18	0	18	0	18	0	18	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES			North-South: 209	East-West: 600	Sum: 809	North-South: 209	East-West: 601	Sum: 810	North-South: 217	East-West: 620	Sum: 837	North-South: 217	East-West: 620	Sum: 837						
VOLUME/CAPACITY (V/C) RATIO:			0.539	0.440	0.558	0.558	0.458	0.558	0.558	0.458	0.558	0.558	0.458	0.558						
LEVEL OF SERVICE (LOS):			A	A	A	A	A	A	A	A	A	A	A							

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.000** Δv/c after mitigation: **0.000**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Hazelton Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:							
	East-West Street:	Sherman Way	2018	2023	Projection Year:	Peak Hour:	AM	0.54	Reviewed by:	Dudek	12/12/2018	Project:						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																		
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT			FUTURE CONDITION W/ PROJECT			FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	1	104	0	104	104	0	107	1	107	0	107	1	107	0	107	1	107
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1	257	8	265	265	0	264	1	264	8	272	1	272	8	272	1	272
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	1	173	0	173	0	0	178	1	0	0	178	1	0	0	178	1	0
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	1	115	7	122	122	0	118	1	118	7	125	1	125	7	125	1	125
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1	342	2	344	344	0	351	1	351	2	353	1	353	2	353	1	353
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	1	36	1	37	0	0	37	1	0	1	38	1	0	1	38	1	0
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left	1	39	6	45	45	0	40	1	40	6	46	1	46	6	46	1	46
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	2	1372	0	1372	504	7	1416	2	520	0	1416	2	520	0	1416	2	520
	Through-Right	1	140	0	140	140	0	144	0	144	0	144	0	144	0	144	0	144
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left	1	281	0	281	281	0	289	1	289	0	289	1	289	0	289	1	289
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	2	1273	0	1273	480	7	1315	2	486	0	1315	2	495	0	1315	2	495
	Through-Right	1	138	29	167	167	0	142	0	142	29	171	0	171	29	171	0	171
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES			North-South: 446	North-South: 448	North-South: 448	North-South: 458	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460	North-South: 460
			East-West: 785	East-West: 785	East-West: 785	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809	East-West: 809
			SUM: 1231	SUM: 1233	SUM: 1233	SUM: 1267	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269	SUM: 1269
VOLUME/CAPACITY (V/C) RATIO:			0.864	0.865	0.865	0.889	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.764	0.765	0.765	0.789	0.791	0.791	0.791	0.791	0.791	0.791	0.791	0.791	0.791	0.791	0.791	0.791
LEVEL OF SERVICE (LOS):			C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.002** Δv/c after mitigation: **0.002**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Hazeltime Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:										
	East-West Street:	Sherman Way	2018	2023	PM	Peak Hour:	0.54	PM	Reviewed by:	12/12/2018	Project: Mid Valley Water Facility										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																					
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Total Volume	No. of Lanes	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	196	0	196	196	1	0	201	0	1	201	0	1	201	0	1	201	1	201	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1	362	2	364	364	1	2	372	0	1	372	2	374	0	1	374	2	374	1	374
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	1	224	0	224	95	1	0	230	0	1	97	0	230	0	1	97	0	230	1	97
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	1	110	34	144	144	1	34	113	0	1	113	34	147	1	147	34	147	1	147	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1	263	9	272	272	1	9	270	0	1	270	9	279	0	1	279	9	279	1	279
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	1	44	7	51	0	1	7	45	0	1	0	7	52	0	1	0	52	1	52	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
EASTBOUND	Left	1	51	1	52	52	1	1	52	0	1	52	1	53	1	53	1	53	1	53	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	2	549	0	1524	549	2	0	1575	9	2	567	0	1575	2	567	9	1575	2	567	
	Through-Right	1	123	0	123	123	1	0	126	0	1	126	0	126	0	1	126	0	126	1	126
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Left	1	129	0	129	129	1	0	133	0	1	133	0	133	1	133	0	133	1	133	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	2	489	0	1352	491	2	0	1398	9	2	506	0	1398	2	508	9	1398	2	508	
	Through-Right	1	116	6	122	122	1	6	119	0	1	119	6	125	0	1	125	6	125	1	125
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES		North-South:	472	North-South:	508	North-South:	485	North-South:	521	North-South:	521	North-South:	521	North-South:	521	North-South:	521	North-South:	521	North-South:	521
		East-West:	678	East-West:	678	East-West:	700	East-West:	700	East-West:	700	East-West:	700	East-West:	700	East-West:	700	East-West:	700	East-West:	700
		SUM:	1150	SUM:	1186	SUM:	1185	SUM:	1221	SUM:	1221	SUM:	1221	SUM:	1221	SUM:	1221	SUM:	1221	SUM:	1221
VOLUME/CAPACITY (V/C) RATIO:		0.807		0.832		0.832		0.857		0.857		0.857		0.857		0.857		0.857		0.857	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.707		0.732		0.732		0.757		0.757		0.757		0.757		0.757		0.757		0.757	
LEVEL OF SERVICE (LOS):		C		C		C		C		C		C		C		C		C		C	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.025** Δv/c after mitigation: **0.025**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Woodman Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
	East-West Street:	Sherman Way	2018	2023	Peak Hour:	AM	0.54	AM	Reviewed by:	Dudek	12/12/2018	Project:								
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																				
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Total Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	160	160	2	162	162	0	164	1	164	2	166	1	166	2	166	1	166	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	3	672	285	5	677	287	0	690	2	293	5	695	2	295	5	695	2	295	
	Through-Right	1	184	184	0	184	184	0	189	1	189	0	189	0	189	0	189	0	189	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	1	271	271	0	271	271	0	278	1	278	0	278	1	278	0	278	1	278	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	2	1203	602	1	1204	602	0	1236	2	618	1	1237	2	619	1	1237	2	619	
EASTBOUND	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	1	542	297	1	543	298	0	557	1	305	1	558	1	306	1	558	1	306	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left	1	245	245	0	245	245	0	252	1	252	0	252	1	252	0	252	1	252	
WESTBOUND	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	3	1310	437	6	1316	439	7	1353	3	451	6	1359	3	453	6	1359	3	453	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Right	1	111	31	1	112	31	0	114	1	32	1	115	1	32	1	115	1	32	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Left	1	121	121	0	121	121	0	124	1	124	0	124	1	124	0	124	1	124	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	2	943	357	26	969	366	7	976	2	369	26	1002	2	378	26	1002	2	378	
	Through-Right	1	128	128	0	128	128	0	131	1	131	0	131	1	131	0	131	1	131	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES	North-South:	762	762	764	North-South:	764	764	782	North-South:	782	782	785	785	North-South:	785	785	785	785	785	
	East-West:	602	602	611	East-West:	611	621	621	621	East-West:	621	621	630	630	East-West:	630	630	630	630	
VOLUME/CAPACITY (V/C) RATIO:	Sum:	1364	1364	1375	Sum:	1375	1403	1403	Sum:	1403	1415	1415	1415	Sum:	1415	1415	1415	1415	1415	
	0.992	0.992	0.992	1.000	1.000	1.020	1.020	1.020	1.020	1.020	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	
LEVEL OF SERVICE (LOS):	0.892	0.892	0.900	0.900	0.900	0.900	0.920	0.920	0.920	0.920	0.920	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	
	D	D	D	D	D	D	E	E	E	E	E	E	E	E	E	E	E	E	E	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.009** Δv/c after mitigation: **0.009**
 Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Woodman Avenue		Year of Count:		Ambient Growth: (%)		Conducted by:		Date:									
	East-West Street:	Sherman Way	2018	2023	PM	Peak Hour:	0.54	PM	Reviewed by:	Dudek	12/12/2018	Project:								
Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity																				
MOVEMENT	EXISTING CONDITION				EXISTING PLUS PROJECT				FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	1	142	0	142	142	0	146	1	146	0	146	1	146	0	146	1	146		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	2	922	1	923	358	0	947	2	367	1	948	2	367	1	948	2	367		
	Through-Right	1	150	0	150	150	0	154	0	154	0	154	0	154	0	154	0	154		
SOUTHBOUND	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left	1	199	0	199	199	0	204	1	204	0	204	1	204	0	204	1	204		
EASTBOUND	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	2	825	6	831	416	6	848	2	424	6	854	2	427	6	854	2	427		
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Right	1	396	0	396	68	0	407	1	71	0	407	1	70	0	407	1	70		
WESTBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left	1	327	1	328	328	1	336	1	336	1	337	1	337	1	337	1	337		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Through	3	1233	30	1263	421	30	1276	3	425	30	1306	3	435	30	1306	3	435		
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Right	1	141	3	144	73	3	148	1	72	3	148	1	75	3	148	1	75		
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES	Left	1	182	0	182	182	0	187	1	187	0	187	1	187	0	187	1	187		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	2	1065	5	1070	424	5	1103	2	437	5	1108	2	439	5	1108	2	439		
	Through-Right	1	202	0	202	202	0	208	0	208	0	208	0	208	0	208	0	208		
SUMMARY	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES		North-South:	556	North-South:	558	571	North-South:	573	North-South:	573	North-South:	573	North-South:	573	North-South:	573	North-South:	573		
		East-West:	749	East-West:	752	773	East-West:	776	East-West:	776	East-West:	776	East-West:	776	East-West:	776	East-West:	776		
		SUM:	1305	SUM:	1310	1344	SUM:	1349	SUM:	1349	SUM:	1349	SUM:	1349	SUM:	1349	SUM:	1349		
VOLUME/CAPACITY (V/C) RATIO:		0.949	0.953	0.977	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.849	0.853	0.877	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881	0.881		
LEVEL OF SERVICE (LOS):		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: **0.004** Δv/c after mitigation: **0.004**
 Significant impacted? **NO** Fully mitigated? **N/A**

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

7600 N. Tyrone Avenue
DOT Case No. SFV 18-47782

Date: May 30, 2019

To: Michelle Levy, Senior City Planner
Department of City Planning



From: Vicente Cordero, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION IMPACT ASSESSMENT FOR THE PROPOSED MID VALLEY WATER FACILITY PROJECT LOCATED AT 7600 NORTH TYRONE AVENUE**

The Department of Transportation (DOT) has reviewed the traffic impact analysis, dated March 2019, prepared by Dudek, for the proposed Mid Valley Water Facility project located at 7600 Tyrone Avenue, in the City of Los Angeles. In order to evaluate the effects of the project's traffic on the available transportation infrastructure, the significance of the project's traffic impacts is measured in terms of change to the volume-to-capacity (V/C) ratio between the "future no project" and the "future with project" scenarios. This change in the V/C ratio is compared to established threshold standards to assess the project-related traffic impacts. Based on DOT's traffic impact criteria¹, the traffic study included the detailed analysis of nine signalized intersections and determined that the project-related traffic would not significantly impact any of the studied intersections as summarized in **Attachments 2a and 2b**.

DISCUSSION AND FINDINGS

A. Project Description

The proposed Mid Valley Water Facility site is located at 7600 North Tyrone Avenue in the Van Nuys area of the City of Los Angeles, adjacent to the existing LADWP Valley Center site occupied by the Power System. The project site is approximately 17.3 acres of empty property already owned by LADWP. Access to the site would be provided from both Tyrone Avenue on the southwest and Hazeltine Avenue on the southeast. The project is expected to be completed by year 2023.

¹ Per the DOT Traffic Study Policies and Procedures, a significant impact is identified as an increase in the Critical Movement Analysis (CMA) value, due to project related traffic, of 0.01 or more when the final ("with project") Level of Service (LOS) is LOS E or F; an increase of 0.020 or more when the final LOS is LOS D; or an increase of 0.040 or more when the final LOS is LOS C.

B. Trip Generation

The project is estimated to generate a net increase of approximately 1,453 daily trips, 210 trips during the a.m. peak hour and 229 trips during the p.m. peak hour. The trip generation estimates are based on rates published by the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 2017. A copy of the trip generation table can be found in **Attachment 1**.

C. Traffic Impacts

The study estimates that the project would not result in significant traffic impacts at any of the nine studied intersections.

PROJECT REQUIREMENTS

A. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of any construction work. Refer to <http://ladot.lacity.org/what-we-do/plan-review> to determine which section to coordinate review of the work site traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours to the extent feasible.

B. Highway Dedication and Street Widening Requirements

On January 20, 2016 the City Council adopted the Mobility Plan 2035 which represents the new Mobility Element of the General Plan. A key feature of the updated plan is to revise street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. Per the new Mobility Element, **Tyrone Avenue and Hazeltine Avenue** have been designated as Collector Streets which would require a 20-foot half-width roadway within a 33-foot half-width right-of-way. The applicant should check with Bureau of Engineering's Land Development Group to determine the specific highway dedication, street widening and/or sidewalk requirements for this project.

C. Parking Requirements

The applicant should check with the Department of Building and Safety on the number of Code-required parking spaces needed for the project.

D. Driveway Access and Circulation

Access to the site would be provided from both Tyrone Avenue on the southwest and Hazeltine Avenue on the southeast of the property. However, the review of this study does not constitute approval of the driveway dimensions, access and circulation scheme. Those require separate review and approval and should be coordinated with DOT's Valley Development Review (6262 Van Nuys Blvd. Suite 320, Van Nuys 91401, @ 818-374-4699). In order to minimize and prevent last minute building design changes, the applicant should contact DOT, prior to the commencement of building or parking layout design efforts, for driveway width and internal circulation requirements. New driveways should be Case 2 -

designed with a recommended width of 30 feet for two-way operations or 16 feet for one-way operations. Delivery truck loading and unloading should take place on site with no vehicles having to back into the project via the proposed project driveways.

E. Development Review Fees

An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT for permit issuance activities was adopted by the Los Angeles City Council in 2009 and updated in 2014. This ordinance identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Durre Shamsi at (818) 374-4694.

- c: Dough Mensman, Council District 2
- Steve Rostam, DOT East Valley District Office
- Fabio Arias, DOT B-Permit Coordinator
- Ali Nahass, BOE Valley District
- Quyen Phen, BOE Land Development Group
- Dennis Pascua, Dudek

Attachment 1
Project Trip Generation Estimates

Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Proposed:								
Mid Valley Water Facility	416 Employee	1,710	236	55	291	47	269	316
Transit Reduction (15%)		-256	-35	-8	-44	-7	-40	-47
Off-Peak Employee Trip Reduction (15%)		0	-30	-7	-37	-6	-34	-40
Net Primary trips		1,453	170	40	210	34	194	229

Attachment 2a
Volume to Capacity Ratios (v/c) and Levels of Service (LOS)
Existing + Project

No.	Intersection	LOS Method	Existing				Existing plus Project				Change in v/c		Significant Impact?	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Van Nuys Boulevard/Saticoy Street	CMA	0.711	C	0.764	C	0.726	C	0.777	C	0.015	0.013	No	No
2	Van Nuys Boulevard/Valerio Street	CMA	0.562	A	0.614	B	0.563	A	0.614	B	0.001	0.000	No	No
3	Tyrone Avenue/Valerio Street	CMA	0.258	A	0.273	A	0.272	A	0.279	A	0.014	0.006	No	No
4	Hazeltine Avenue/Valerio Street	CMA	0.593	A	0.548	A	0.650	B	0.585	A	0.057	0.037	No	No
5	Woodman Avenue/Valerio Street	CMA	0.809	D	0.631	B	0.824	D	0.661	B	0.015	0.030	No	No
6	Van Nuys Boulevard/Sherman Way	CMA	0.660	B	0.763	C	0.666	B	0.770	C	0.006	0.007	No	No
7	Tyrone Avenue/Sherman Way	CMA	0.464	A	0.439	A	0.468	A	0.440	A	0.004	0.001	No	No
8	Hazeltine Avenue/Sherman Way	CMA	0.764	C	0.707	C	0.765	C	0.732	C	0.001	0.025	No	No
9	Woodman Avenue/Sherman Way	CMA	0.892	D	0.849	D	0.900	D	0.853	D	0.008	0.004	No	No

Source: Dudek 2019

Note: CMA = LADOT CMA Methodology; BOLD value indicates unsatisfactory LOS

¹ Volume-to-Capacity (v/c) ratio² Level of Service (LOS)

Attachment 2b
Volume to Capacity Ratios (v/c) and Levels of Service (LOS)
Cumulative (2023) + Project

No.	Intersection	LOS Method	Future 2023				Future 2023 plus Project				Change in v/c		Significant Impact	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Van Nuys Boulevard/Saticoy Street	CMA	0.734	C	0.787	C	0.749	C	0.800	C	0.015	0.013	No	No
2	Van Nuys Boulevard/Valerio Street	CMA	0.583	A	0.635	B	0.583	A	0.636	B	0.000	0.001	No	No
3	Tyrone Avenue/Valerio Street	CMA	0.268	A	0.283	A	0.282	A	0.290	A	0.014	0.007	No	No
4	Hazeltine Avenue/Valerio Street	CMA	0.611	B	0.566	A	0.668	B	0.601	B	0.057	0.035	No	No
5	Woodman Avenue/Valerio Street	CMA	0.833	D	0.653	B	0.849	D	0.683	B	0.016	0.030	No	No
6	Van Nuys Boulevard/Sherman Way	CMA	0.699	B	0.797	C	0.705	C	0.803	D	0.006	0.006	No	No
7	Tyrone Avenue/Sherman Way	CMA	0.481	A	0.458	A	0.485	A	0.458	A	0.004	0.000	No	No
8	Hazeltine Avenue/Sherman Way	CMA	0.789	C	0.732	C	0.791	C	0.757	C	0.002	0.025	No	No
9	Woodman Avenue/Sherman Way	CMA	0.920	E	0.877	D	0.929	E	0.881	D	0.009	0.004	No	No

Source: Dudek 2019

Note: CMA = LADOT CMA Methodology; BOLD value indicates unsatisfactory LOS

¹ Volume-to-Capacity (v/c) ratio² Level of Service (LOS)

