

APPENDIX E

Construction Noise Analysis Data

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/20/2019
 Case Description: Western Trunk Line - Open Trench Pipe Installation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Nearest Receivers	Residential	75	70	65				
Description		Impact Device	Usage(%)					
Concrete Saw		No	20		89.6	30	0	
Excavator		No	40		80.7	40	0	
Excavator		No	40		80.7	100	0	
Excavator		No	40		80.7	200	0	
Crane		No	16		80.6	50	0	
Dump Truck		No	40		76.5	100	0	
Generator		No	50		80.6	40	0	
Flat Bed Truck		No	40		74.3	200	0	
Backhoe		No	40		77.6	300	0	
Front End Loader		No	40		79.1	100	0	
Welder / Torch		No	40		74	75	0	
Paver		No	50		77.2	100	0	
All Other Equipment > 5 HP		No	50	85		200	0	
Compactor (ground)		No	20		83.2	50	0	
Roller		No	20		80	100	0	
Compressor (air)		No	40		77.7	100	0	

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)		
	*Lmax	Leq	Day		Evening		
			Lmax	Leq	Lmax	Leq	
Concrete Saw	94	87	N/A	N/A	N/A	N/A	
Excavator	82.6	78.7	N/A	N/A	N/A	N/A	
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	
Crane	80.6	72.6	N/A	N/A	N/A	N/A	
Dump Truck	70.4	66.5	N/A	N/A	N/A	N/A	
Generator	82.6	79.6	N/A	N/A	N/A	N/A	
Flat Bed Truck	62.2	58.2	N/A	N/A	N/A	N/A	
Backhoe	62	58	N/A	N/A	N/A	N/A	
Front End Loader	73.1	69.1	N/A	N/A	N/A	N/A	
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	
Paver	71.2	68.2	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	73	69.9	N/A	N/A	N/A	N/A	
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	
Roller	74	67	N/A	N/A	N/A	N/A	
Compressor (air)	71.6	67.7	N/A	N/A	N/A	N/A	
Total	94	89	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night

In the Vicinity Residential 75 70 65

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	250	0	
Excavator	No	40	80.7	250	0	
Excavator	No	40	80.7	250	0	
Crane	No	16	80.6	250	0	
Dump Truck	No	40	76.5	250	0	
Generator	No	50	80.6	250	0	
Flat Bed Truck	No	40	74.3	250	0	
Backhoe	No	40	77.6	250	0	
Front End Loader	No	40	79.1	250	0	
Welder / Torch	No	40	74	250	0	
Paver	No	50	77.2	250	0	
All Other Equipment > 5 HP	No	50	85	250	0	
Compactor (ground)	No	20	83.2	250	0	
Roller	No	20	80	250	0	
Compressor (air)	No	40	77.7	250	0	

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	
Concrete Saw	75.6	68.6	N/A	N/A	N/A	N/A	
Excavator	66.7	62.8	N/A	N/A	N/A	N/A	
Excavator	66.7	62.8	N/A	N/A	N/A	N/A	
Excavator	66.7	62.8	N/A	N/A	N/A	N/A	
Crane	66.6	58.6	N/A	N/A	N/A	N/A	
Dump Truck	62.5	58.5	N/A	N/A	N/A	N/A	
Generator	66.7	63.6	N/A	N/A	N/A	N/A	
Flat Bed Truck	60.3	56.3	N/A	N/A	N/A	N/A	
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A	
Front End Loader	65.1	61.2	N/A	N/A	N/A	N/A	
Welder / Torch	60	56	N/A	N/A	N/A	N/A	
Paver	63.2	60.2	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	71	68	N/A	N/A	N/A	N/A	
Compactor (ground)	69.3	62.3	N/A	N/A	N/A	N/A	
Roller	66	59	N/A	N/A	N/A	N/A	
Compressor (air)	63.7	59.7	N/A	N/A	N/A	N/A	
Total	75.6	74.8	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 6/20/2019
 Case Description: Wstrn Trnk Lne - Pipe Installation_Backfilling (Jacking / Receiveing Pits)

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest Receivers	Residential	75	70	65

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	40	0	
Excavator	No	40	80.7	100	0	
Excavator	No	40	80.7	200	0	
Crane	No	16	80.6	50	0	
Dump Truck	No	40	76.5	100	0	
Generator	No	50	80.6	40	0	
Flat Bed Truck	No	40	74.3	200	0	
Backhoe	No	40	77.6	300	0	
Front End Loader	No	40	79.1	100	0	
Welder / Torch	No	40	74	75	0	
Paver	No	50	77.2	100	0	
All Other Equipment > 5 HP	No	50	85	200	0	
Compactor (ground)	No	20	83.2	50	0	
Roller	No	20	80	100	0	
Compressor (air)	No	40	77.7	100	0	

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Concrete Saw	94	87	N/A	N/A	N/A	N/A
Excavator	82.6	78.7	N/A	N/A	N/A	N/A
Excavator	74.7	70.7	N/A	N/A	N/A	N/A
Excavator	68.7	64.7	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A
Dump Truck	70.4	66.5	N/A	N/A	N/A	N/A
Generator	82.6	79.6	N/A	N/A	N/A	N/A
Flat Bed Truck	62.2	58.2	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A
Front End Loader	73.1	69.1	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A
Paver	71.2	68.2	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	73	69.9	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A
Roller	74	67	N/A	N/A	N/A	N/A
Compressor (air)	71.6	67.7	N/A	N/A	N/A	N/A
Total	94	89	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
In the Vicinity	Residential	75	70	65

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	250	0	
Excavator	No	40	80.7	250	0	
Excavator	No	40	80.7	250	0	
Crane	No	16	80.6	250	0	

Dump Truck	No	40		76.5	250	0
Generator	No	50		80.6	250	0
Flat Bed Truck	No	40		74.3	250	0
Backhoe	No	40		77.6	250	0
Front End Loader	No	40		79.1	250	0
Welder / Torch	No	40		74	250	0
Paver	No	50		77.2	250	0
All Other Equipment > 5 HP	No	50	85		250	0
Compactor (ground)	No	20		83.2	250	0
Roller	No	20		80	250	0
Compressor (air)	No	40		77.7	250	0

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day	Leq	Evening	
Lmax			Lmax		Leq	
Concrete Saw	75.6	68.6	N/A	N/A	N/A	N/A
Excavator	66.7	62.8	N/A	N/A	N/A	N/A
Excavator	66.7	62.8	N/A	N/A	N/A	N/A
Excavator	66.7	62.8	N/A	N/A	N/A	N/A
Crane	66.6	58.6	N/A	N/A	N/A	N/A
Dump Truck	62.5	58.5	N/A	N/A	N/A	N/A
Generator	66.7	63.6	N/A	N/A	N/A	N/A
Flat Bed Truck	60.3	56.3	N/A	N/A	N/A	N/A
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader	65.1	61.2	N/A	N/A	N/A	N/A
Welder / Torch	60	56	N/A	N/A	N/A	N/A
Paver	63.2	60.2	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	71	68	N/A	N/A	N/A	N/A
Compactor (ground)	69.3	62.3	N/A	N/A	N/A	N/A
Roller	66	59	N/A	N/A	N/A	N/A
Compressor (air)	63.7	59.7	N/A	N/A	N/A	N/A
Total	75.6	74.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/20/2019
Case Description: Wstrn Trnk Lne - Pipe Installation_via Jacking

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)			Equipment		
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
Nearest Receivers	Residential	75	70	65			
Description		Impact Device	Usage(%)				
Excavator		No	40		80.7	30	0
Dump Truck		No	40		76.5	50	0
Generator		No	50		80.6	50	0
Flat Bed Truck		No	40		74.3	75	0
Pumps		No	50		80.9	100	0
Flat Bed Truck		No	40		74.3	100	0
Crane		No	16		80.6	75	0

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Excavator	85.1	81.2	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A
Flat Bed Truck	70.7	66.7	N/A	N/A	N/A	N/A
Pumps	74.9	71.9	N/A	N/A	N/A	N/A
Flat Bed Truck	68.2	64.3	N/A	N/A	N/A	N/A
Crane	77	69.1	N/A	N/A	N/A	N/A
Total	85.1	83.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description In the Vicinity	Land Use Residential	Baselines (dBA)		
		Daytime	Evening	Night
		75	70	65

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	250	0
Dump Truck	No	40		76.5	250	0
Generator	No	50		80.6	250	0
Flat Bed Truck	No	40		74.3	250	0
Pumps	No	50		80.9	250	0
Flat Bed Truck	No	40		74.3	250	0
Crane	No	16		80.6	250	0

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Excavator	66.7	62.8	N/A	N/A	N/A	N/A
Dump Truck	62.5	58.5	N/A	N/A	N/A	N/A
Generator	66.7	63.6	N/A	N/A	N/A	N/A
Flat Bed Truck	60.3	56.3	N/A	N/A	N/A	N/A
Pumps	67	64	N/A	N/A	N/A	N/A
Flat Bed Truck	60.3	56.3	N/A	N/A	N/A	N/A
Crane	66.6	58.6	N/A	N/A	N/A	N/A
Total	67	69.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX F

Traffic Analysis Data

CLASSIFICATION

Western Ave S/O Manchester Ave

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	162	12	0	1	0	0	1	0	0	0	0	0	176
01:00	0	97	10	2	0	0	0	1	0	0	0	0	0	110
02:00	0	57	5	0	0	0	0	1	0	0	0	0	0	63
03:00	0	60	3	0	0	0	0	1	0	0	0	0	0	64
04:00	0	91	7	1	0	0	0	3	1	0	0	0	0	103
05:00	0	231	26	1	1	1	0	5	0	0	0	0	0	265
06:00	0	627	101	13	9	0	0	6	0	0	1	0	0	757
07:00	1	883	104	7	11	0	0	3	1	0	0	0	0	1010
08:00	1	836	113	9	9	2	0	6	0	0	1	0	0	977
09:00	0	716	94	4	12	0	0	4	0	0	0	0	0	830
10:00	2	611	82	3	4	0	0	3	1	0	1	0	0	707
11:00	0	638	81	2	7	1	0	5	1	0	0	0	0	735
12:00 PM	1	709	83	7	4	4	0	1	1	0	0	0	0	810
13:00	0	694	88	5	12	0	1	4	1	0	0	0	0	805
14:00	2	707	87	6	7	0	0	5	0	0	0	0	0	814
15:00	3	758	82	5	6	2	0	3	1	0	1	0	0	861
16:00	2	843	89	16	11	1	1	4	1	0	1	0	0	969
17:00	2	839	86	8	6	1	0	1	1	0	0	0	0	944
18:00	1	780	78	4	8	1	0	2	0	0	0	0	0	874
19:00	0	676	66	2	4	0	0	2	0	0	0	0	0	750
20:00	0	582	64	1	4	0	0	1	0	0	0	0	0	652
21:00	2	520	47	2	5	0	0	1	2	0	0	0	0	579
22:00	0	342	37	1	2	0	0	1	0	0	0	0	0	383
23:00	0	245	26	1	1	0	0	1	0	0	0	0	0	274
Totals	17	12704	1471	100	124	13	2	65	11		5			14512
% of Totals	0%	88%	10%	1%	1%	0%	0%	0%	0%		0%			100%

AM Volumes	4	5009	638	42	54	4	0	39	4	0	3	0	0	5797
% AM	0%	35%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%
AM Peak Hour	10:00	07:00	08:00	06:00	09:00	08:00	06:00	04:00	06:00	06:00	07:00			07:00
Volume	2	883	113	13	12	2		6	1		1			1010
PM Volumes	13	7695	833	58	70	9	2	26	7	0	2	0	0	8715
% PM	0%	53%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	60%
PM Peak Hour	15:00	16:00	16:00	16:00	13:00	12:00	13:00	14:00	21:00	15:00				16:00
Volume	3	843	89	16	12	4	1	5	2		1			969

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1987	↔ 14%	1615	↔ 11%	1913	↔ 13%	8997	↔ 62%

Classification Definitions			
Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers
Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers
			13 >=7-Axle Multi-Trailers

CLASSIFICATION

Western Ave S/O Manchester Ave

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	107	14	0	1	0	0	3	0	0	0	0	0	125
01:00	0	90	13	1	0	0	0	1	0	0	0	0	0	105
02:00	0	70	11	0	0	1	0	1	0	0	0	0	0	83
03:00	0	68	6	0	0	0	0	1	0	0	0	0	0	75
04:00	0	68	15	0	0	0	0	1	0	0	0	0	0	84
05:00	0	207	39	1	5	0	0	4	0	0	0	0	0	256
06:00	0	400	75	3	10	0	0	3	4	0	0	0	0	495
07:00	0	719	132	7	5	0	0	3	0	0	0	0	0	866
08:00	0	687	107	7	13	1	0	5	0	0	0	0	0	820
09:00	0	583	97	4	8	1	0	4	1	0	0	0	0	698
10:00	0	555	95	5	6	0	0	3	0	0	0	0	0	664
11:00	0	600	108	4	7	1	0	3	1	0	0	0	0	724
12:00 PM	2	686	112	6	13	1	0	3	0	0	0	0	0	823
13:00	0	776	116	5	11	1	0	3	1	0	0	0	0	913
14:00	1	873	132	5	8	0	0	4	0	0	0	0	0	1023
15:00	2	896	137	7	10	0	1	3	1	0	0	0	0	1057
16:00	1	921	156	6	9	0	0	4	0	0	0	0	0	1097
17:00	0	882	142	9	3	1	0	6	0	0	0	0	0	1043
18:00	0	821	116	6	8	1	0	4	0	0	0	0	0	956
19:00	1	681	100	8	7	1	0	3	0	0	0	0	0	801
20:00	1	531	65	3	4	0	0	1	2	0	0	0	0	607
21:00	0	463	67	1	2	0	0	2	1	0	0	0	0	536
22:00	0	311	41	1	1	0	0	2	0	0	0	0	0	356
23:00	0	213	30	2	0	0	0	1	0	0	0	0	0	246
Totals	8	12208	1926	91	131	9	1	68	11					14453
% of Totals	0%	84%	13%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	0	4154	712	32	55	4	0	32	6	0	0	0	0	4995
% AM		29%	5%	0%	0%	0%		0%	0%					35%
AM Peak Hour		07:00	07:00	07:00	08:00	02:00		08:00	06:00					07:00
Volume		719	132	7	13	1		5	4					866
PM Volumes	8	8054	1214	59	76	5	1	36	5	0	0	0	0	9458
% PM	0%	56%	8%	0%	1%	0%	0%	0%	0%					65%
PM Peak Hour		12:00	16:00	16:00	17:00	12:00	15:00	17:00	20:00					16:00
Volume		2	921	156	9	13	1	6	2					1097

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1686	↔ 12%	1736	↔ 12%	2140	↔ 15%	8891	↔ 62%

Classification Definitions				
1 Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

CLASSIFICATION

Western Ave S/O Manchester Ave

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	269	26	0	2	0	0	4	0	0	0	0	0	301
01:00	0	187	23	3	0	0	0	2	0	0	0	0	0	215
02:00	0	127	16	0	0	1	0	2	0	0	0	0	0	146
03:00	0	128	9	0	0	0	0	2	0	0	0	0	0	139
04:00	0	159	22	1	0	0	0	4	1	0	0	0	0	187
05:00	0	438	65	2	6	1	0	9	0	0	0	0	0	521
06:00	0	1027	176	16	19	0	0	9	4	0	1	0	0	1252
07:00	1	1602	236	14	16	0	0	6	1	0	0	0	0	1876
08:00	1	1523	220	16	22	3	0	11	0	0	1	0	0	1797
09:00	0	1299	191	8	20	1	0	8	1	0	0	0	0	1528
10:00	2	1166	177	8	10	0	0	6	1	0	1	0	0	1371
11:00	0	1238	189	6	14	2	0	8	2	0	0	0	0	1459
12:00 PM	3	1395	195	13	17	5	0	4	1	0	0	0	0	1633
13:00	0	1470	204	10	23	1	1	7	2	0	0	0	0	1718
14:00	3	1580	219	11	15	0	0	9	0	0	0	0	0	1837
15:00	5	1654	219	12	16	2	1	6	2	0	1	0	0	1918
16:00	3	1764	245	22	20	1	1	8	1	0	1	0	0	2066
17:00	2	1721	228	17	9	2	0	7	1	0	0	0	0	1987
18:00	1	1601	194	10	16	2	0	6	0	0	0	0	0	1830
19:00	1	1357	166	10	11	1	0	5	0	0	0	0	0	1551
20:00	1	1113	129	4	8	0	0	2	2	0	0	0	0	1259
21:00	2	983	114	3	7	0	0	3	3	0	0	0	0	1115
22:00	0	653	78	2	3	0	0	3	0	0	0	0	0	739
23:00	0	458	56	3	1	0	0	2	0	0	0	0	0	520
Totals	25	24912	3397	191	255	22	3	133	22	5	5	0	0	28965
% of Totals	0%	86%	12%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	100%

AM Volumes	4	9163	1350	74	109	8	0	71	10	0	3	0	0	10792
% AM	0%	32%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%
AM Peak Hour	10:00	07:00	07:00	06:00	08:00	08:00	08:00	06:00	06:00	06:00	06:00	06:00	06:00	07:00
Volume	2	1602	236	16	22	3	11	4	1	1	1	1	1	1876
PM Volumes	21	15749	2047	117	146	14	3	62	12	0	2	0	0	18173
% PM	0%	54%	7%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	63%
PM Peak Hour	15:00	16:00	16:00	16:00	13:00	12:00	13:00	14:00	21:00	21:00	15:00	15:00	15:00	16:00
Volume	5	1764	245	22	23	5	1	9	3	3	1	1	1	2066
Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes							
	Volume		%	Volume		%	Volume		%	Volume		%	Volume	%
	3673	↔	13%	3351	↔	12%	4053	↔	14%	17888	↔	62%		

Classification Definitions				
1 Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

VOLUME

Western Ave S/O Manchester Ave

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_002

DAILY TOTALS					NB	SB	EB	WB	Total					
					14,512	14,453	0	0	28,965					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	61	39	0	0	100	12:00	174	191	0	0	365			
00:15	45	30	0	0	75	12:15	241	200	0	0	441			
00:30	30	32	0	0	62	12:30	192	217	0	0	409			
00:45	40	176	24	125	0	0	203	810	215	823	0	0	418	1633
01:00	30	37	0	0	67	13:00	210	225	0	0	435			
01:15	30	22	0	0	52	13:15	199	212	0	0	411			
01:30	28	23	0	0	51	13:30	200	242	0	0	442			
01:45	22	110	23	105	0	0	196	805	234	913	0	0	430	1718
02:00	16	16	0	0	32	14:00	201	280	0	0	481			
02:15	19	27	0	0	46	14:15	210	244	0	0	454			
02:30	14	17	0	0	31	14:30	191	258	0	0	449			
02:45	14	63	23	83	0	0	212	814	241	1023	0	0	453	1837
03:00	17	19	0	0	36	15:00	197	263	0	0	460			
03:15	16	17	0	0	33	15:15	226	282	0	0	508			
03:30	18	16	0	0	34	15:30	234	262	0	0	496			
03:45	13	64	23	75	0	0	204	861	250	1057	0	0	454	1918
04:00	18	13	0	0	31	16:00	241	233	0	0	474			
04:15	28	14	0	0	42	16:15	271	306	0	0	577			
04:30	28	21	0	0	49	16:30	208	253	0	0	461			
04:45	29	103	36	84	0	0	249	969	305	1097	0	0	554	2066
05:00	47	40	0	0	87	17:00	228	276	0	0	504			
05:15	44	57	0	0	101	17:15	223	233	0	0	456			
05:30	73	74	0	0	147	17:30	258	244	0	0	502			
05:45	101	265	85	256	0	0	235	944	290	1043	0	0	525	1987
06:00	145	95	0	0	240	18:00	229	257	0	0	486			
06:15	200	112	0	0	312	18:15	224	251	0	0	475			
06:30	191	138	0	0	329	18:30	233	219	0	0	452			
06:45	221	757	150	495	0	0	188	874	229	956	0	0	417	1830
07:00	242	169	0	0	411	19:00	200	228	0	0	428			
07:15	256	219	0	0	475	19:15	200	197	0	0	397			
07:30	263	246	0	0	509	19:30	175	205	0	0	380			
07:45	249	1010	232	866	0	0	175	750	171	801	0	0	346	1551
08:00	269	234	0	0	503	20:00	169	151	0	0	320			
08:15	256	202	0	0	458	20:15	177	163	0	0	340			
08:30	243	183	0	0	426	20:30	157	153	0	0	310			
08:45	209	977	201	820	0	0	149	652	140	607	0	0	289	1259
09:00	195	190	0	0	385	21:00	149	143	0	0	292			
09:15	234	174	0	0	408	21:15	142	156	0	0	298			
09:30	203	168	0	0	371	21:30	157	104	0	0	261			
09:45	198	830	166	698	0	0	131	579	133	536	0	0	264	1115
10:00	174	169	0	0	343	22:00	110	96	0	0	206			
10:15	177	156	0	0	333	22:15	104	122	0	0	226			
10:30	165	166	0	0	331	22:30	84	71	0	0	155			
10:45	191	707	173	664	0	0	85	383	67	356	0	0	152	739
11:00	184	173	0	0	357	23:00	77	78	0	0	155			
11:15	167	194	0	0	361	23:15	74	58	0	0	132			
11:30	191	166	0	0	357	23:30	62	60	0	0	122			
11:45	193	735	191	724	0	0	61	274	50	246	0	0	111	520
TOTALS	5797	4995			10792	TOTALS	8715	9458			18173			
SPLIT %	53.7%	46.3%			37.3%	SPLIT %	48.0%	52.0%			62.7%			

DAILY TOTALS					NB	SB	EB	WB	Total
					14,512	14,453	0	0	28,965

AM Peak Hour	07:15	07:15			07:15	PM Peak Hour	16:00	16:15			16:15
AM Pk Volume	1037	931			1968	PM Pk Volume	969	1140			2096
Pk Hr Factor	0.964	0.946			0.967	Pk Hr Factor	0.894	0.931			0.908
7 - 9 Volume	1987	1686	0	0	3673	4 - 6 Volume	1913	2140	0	0	4053
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	1037	931	0	0	1968	4 - 6 Pk Volume	969	1140	0	0	2096
Pk Hr Factor	0.964	0.946	0.000	0.000	0.967	Pk Hr Factor	0.894	0.931	0.000	0.000	0.908

CLASSIFICATION
Western Ave S/O Imperial Hwy

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_003n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	88	13	0	1	0	0	0	0	0	0	0	0	102
01:00	0	59	5	1	1	0	0	0	0	0	0	0	0	66
02:00	0	37	9	0	0	0	0	0	0	0	0	0	0	46
03:00	0	49	4	0	0	0	0	0	1	0	0	0	0	54
04:00	0	74	14	0	1	0	0	0	0	0	0	0	0	89
05:00	0	166	34	0	7	0	0	0	0	0	0	0	0	207
06:00	0	536	95	2	22	3	0	1	2	0	0	0	0	661
07:00	1	984	162	2	21	4	0	1	1	0	0	0	0	1176
08:00	2	974	146	6	22	6	0	2	1	0	0	0	0	1159
09:00	0	713	140	3	22	0	1	1	0	0	0	0	0	880
10:00	0	657	115	5	20	3	2	1	0	0	0	0	0	803
11:00	0	686	118	4	16	4	0	0	0	0	0	0	0	828
12:00 PM	0	773	128	5	21	3	1	1	2	0	0	0	0	934
13:00	0	877	134	1	21	5	0	1	1	0	0	0	0	1040
14:00	0	824	121	2	15	5	0	0	1	0	0	0	0	968
15:00	0	1088	160	3	22	1	0	1	1	0	0	0	0	1276
16:00	2	1050	161	5	17	2	1	1	3	0	0	0	0	1242
17:00	0	1058	145	4	10	1	0	0	0	0	0	0	0	1218
18:00	1	1048	140	2	16	1	1	1	1	0	0	0	0	1211
19:00	0	666	90	3	11	0	0	0	1	0	0	0	0	771
20:00	0	542	71	1	9	0	0	1	0	0	0	0	0	624
21:00	0	431	62	0	3	0	0	0	0	0	0	0	0	496
22:00	0	299	32	1	4	0	0	0	0	0	0	0	0	336
23:00	0	205	21	0	4	0	0	0	0	0	0	0	0	230
Totals	6	13884	2120	50	286	38	6	12	15					16417
% of Totals	0%	85%	13%	0%	2%	0%	0%	0%	0%					100%

AM Volumes	3	5023	855	23	133	20	3	6	5	0	0	0	0	6071	
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%	
AM Peak Hour	08:00	07:00	07:00	08:00	06:00	08:00	10:00	08:00	06:00					07:00	
Volume	2	984	162	6	22	6	2	2	2					1176	
PM Volumes	3	8861	1265	27	153	18	3	6	10	0	0	0	0	10346	
% PM	0%	54%	8%	0%	1%	0%	0%	0%	0%					63%	
PM Peak Hour	16:00	15:00	16:00	12:00	15:00	13:00	12:00	12:00	16:00					15:00	
Volume	2	1088	161	5	22	5	1	1	3					1276	
Directional Peak Periods All Classes	AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
	Volume		%		Volume		%		Volume		%		Volume	%	
	2335	↔	14%		1974	↔	12%		2460	↔	15%		9648	↔	59%

Classification Definitions			
Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers
Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers
			13 >=7-Axle Multi-Trailers

CLASSIFICATION
Western Ave S/O Imperial Hwy

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_003s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	100	9	0	1	0	0	0	1	0	0	0	0	111
01:00	0	49	6	0	0	0	0	0	0	0	0	0	0	55
02:00	0	51	2	0	0	0	0	0	1	0	0	0	0	54
03:00	0	62	3	0	0	0	0	1	0	0	0	0	0	66
04:00	0	100	17	0	0	0	0	0	0	0	0	0	0	117
05:00	0	235	32	2	4	1	0	2	1	0	0	0	0	277
06:00	0	437	58	4	9	1	0	0	1	0	0	0	0	510
07:00	0	895	95	6	8	1	0	0	3	0	0	0	0	1008
08:00	2	818	95	4	14	1	0	2	1	0	0	0	0	937
09:00	1	634	80	5	11	1	0	0	1	0	0	0	0	733
10:00	0	615	63	6	6	2	0	0	1	0	0	0	0	693
11:00	2	629	69	8	11	0	1	0	1	0	0	0	0	721
12:00 PM	0	705	98	6	12	2	0	0	0	0	0	0	0	823
13:00	1	761	99	5	10	2	0	2	0	0	0	0	0	880
14:00	0	898	108	6	17	1	0	0	0	0	0	0	0	1030
15:00	0	962	111	4	12	3	1	2	3	0	0	0	0	1098
16:00	0	1076	123	8	10	3	4	2	3	0	0	0	0	1229
17:00	1	1088	105	3	15	1	0	2	0	0	0	0	0	1215
18:00	0	829	88	3	12	4	0	1	2	0	0	0	0	939
19:00	0	657	63	3	10	0	0	2	0	0	0	0	0	735
20:00	0	521	45	1	6	0	0	1	0	0	0	0	0	574
21:00	0	379	42	0	2	0	0	1	1	0	0	0	0	425
22:00	0	266	26	0	1	0	0	0	0	0	0	0	0	293
23:00	0	177	14	0	1	0	0	0	0	0	0	0	0	192
Totals	7	12944	1451	74	172	23	6	18	20					14715
% of Totals	0%	88%	10%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	4625	529	35	64	7	1	5	11	0	0	0	0	5282
% AM	0%	31%	4%	0%	0%	0%	0%	0%	0%					36%
AM Peak Hour	08:00	07:00	07:00	11:00	08:00	10:00	11:00	05:00	07:00					07:00
Volume	2	895	95	8	14	2	1	2	3					1008
PM Volumes	2	8319	922	39	108	16	5	13	9	0	0	0	0	9433
% PM	0%	57%	6%	0%	1%	0%	0%	0%	0%					64%
PM Peak Hour	13:00	17:00	16:00	16:00	14:00	18:00	16:00	13:00	15:00					16:00
Volume	1	1088	123	8	17	4	4	2	3					1229

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1945	↔ 13%	1703	↔ 12%	2444	↔ 17%	8623	↔ 59%

Classification Definitions				
1 Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

CLASSIFICATION
Western Ave S/O Imperial Hwy

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_003

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	188	22	0	2	0	0	0	1	0	0	0	0	213
01:00	0	108	11	1	1	0	0	0	0	0	0	0	0	121
02:00	0	88	11	0	0	0	0	0	1	0	0	0	0	100
03:00	0	111	7	0	0	0	0	1	1	0	0	0	0	120
04:00	0	174	31	0	1	0	0	0	0	0	0	0	0	206
05:00	0	401	66	2	11	1	0	2	1	0	0	0	0	484
06:00	0	973	153	6	31	4	0	1	3	0	0	0	0	1171
07:00	1	1879	257	8	29	5	0	1	4	0	0	0	0	2184
08:00	4	1792	241	10	36	7	0	4	2	0	0	0	0	2096
09:00	1	1347	220	8	33	1	1	1	1	0	0	0	0	1613
10:00	0	1272	178	11	26	5	2	1	1	0	0	0	0	1496
11:00	2	1315	187	12	27	4	1	0	1	0	0	0	0	1549
12:00 PM	0	1478	226	11	33	5	1	1	2	0	0	0	0	1757
13:00	1	1638	233	6	31	7	0	3	1	0	0	0	0	1920
14:00	0	1722	229	8	32	6	0	0	1	0	0	0	0	1998
15:00	0	2050	271	7	34	4	1	3	4	0	0	0	0	2374
16:00	2	2126	284	13	27	5	5	3	6	0	0	0	0	2471
17:00	1	2146	250	7	25	2	0	2	0	0	0	0	0	2433
18:00	1	1877	228	5	28	5	1	2	3	0	0	0	0	2150
19:00	0	1323	153	6	21	0	0	2	1	0	0	0	0	1506
20:00	0	1063	116	2	15	0	0	2	0	0	0	0	0	1198
21:00	0	810	104	0	5	0	0	1	1	0	0	0	0	921
22:00	0	565	58	1	5	0	0	0	0	0	0	0	0	629
23:00	0	382	35	0	5	0	0	0	0	0	0	0	0	422
Totals	13	26828	3571	124	458	61	12	30	35					31132
% of Totals	0%	86%	11%	0%	1%	0%	0%	0%	0%					100%

AM Volumes	8	9648	1384	58	197	27	4	11	16	0	0	0	0	11353	
% AM	0%	31%	4%	0%	1%	0%	0%	0%	0%					36%	
AM Peak Hour	08:00	07:00	07:00	11:00	08:00	08:00	10:00	08:00	07:00					07:00	
Volume	4	1879	257	12	36	7	2	4	4					2184	
PM Volumes	5	17180	2187	66	261	34	8	19	19	0	0	0	0	19779	
% PM	0%	55%	7%	0%	1%	0%	0%	0%	0%					64%	
PM Peak Hour	16:00	17:00	16:00	16:00	15:00	13:00	16:00	13:00	16:00					16:00	
Volume	2	2146	284	13	34	7	5	3	6					2471	
Directional Peak Periods All Classes	AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes		
	Volume		%		Volume		%		Volume		%		Volume	%	
	4280	↔	14%		3677	↔	12%		4904	↔	16%		18271	↔	59%

Classification Definitions				
1 Motorcycles	4 Buses	7 >=4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

VOLUME

Western Ave S/O Imperial Hwy

Day: Tuesday
Date: 6/4/2019

City: Los Angeles
Project #: CA19_5355_003

DAILY TOTALS					NB	SB	EB	WB	Total				
					16,417	14,715	0	0	31,132				
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	32	43	0	0	75	12:00	217	201	0	0	418		
00:15	26	21	0	0	47	12:15	232	204	0	0	436		
00:30	18	24	0	0	42	12:30	231	209	0	0	440		
00:45	26	102	23	111	0	0	49	213	0	0	463		
01:00	19	17	0	0	36	12:45	254	934	209	823	0	0	463
01:15	15	14	0	0	29	13:00	269	176	0	0	445		
01:30	15	16	0	0	31	13:15	247	231	0	0	478		
01:45	17	66	8	55	0	0	292	217	0	0	509		
02:00	8	16	0	0	24	13:45	232	1040	256	880	0	0	488
02:15	15	7	0	0	22	14:00	229	244	0	0	473		
02:30	11	19	0	0	30	14:15	243	255	0	0	498		
02:45	12	46	12	54	0	0	255	236	0	0	491		
03:00	18	16	0	0	34	14:30	241	968	295	1030	0	0	536
03:15	13	11	0	0	24	14:45	321	257	0	0	578		
03:30	15	20	0	0	35	15:00	320	287	0	0	607		
03:45	8	54	19	66	0	0	345	294	0	0	639		
04:00	15	19	0	0	34	15:15	290	1276	260	1098	0	0	550
04:15	20	27	0	0	47	15:30	278	305	0	0	583		
04:30	17	26	0	0	43	16:00	324	318	0	0	642		
04:45	37	89	45	117	0	0	308	317	0	0	625		
05:00	28	51	0	0	79	16:15	332	1242	289	1229	0	0	621
05:15	42	48	0	0	90	16:30	305	289	0	0	594		
05:30	63	84	0	0	147	16:45	328	313	0	0	641		
05:45	74	207	94	277	0	0	273	308	0	0	581		
06:00	119	95	0	0	214	17:00	312	1218	305	1215	0	0	617
06:15	165	136	0	0	301	17:15	328	285	0	0	613		
06:30	167	138	0	0	305	17:30	350	290	0	0	640		
06:45	210	661	141	510	0	0	313	209	0	0	522		
07:00	243	181	0	0	424	17:45	220	1211	155	939	0	0	375
07:15	257	218	0	0	475	18:00	236	201	0	0	437		
07:30	326	295	0	0	621	18:15	204	184	0	0	388		
07:45	350	1176	314	1008	0	0	158	180	0	0	338		
08:00	301	275	0	0	576	18:30	173	771	170	735	0	0	343
08:15	300	222	0	0	522	18:45	176	140	0	0	316		
08:30	286	219	0	0	505	19:00	160	151	0	0	311		
08:45	272	1159	221	937	0	0	146	128	0	0	274		
09:00	229	182	0	0	411	19:15	142	624	155	574	0	0	297
09:15	219	192	0	0	411	19:30	125	117	0	0	242		
09:30	225	178	0	0	403	19:45	113	131	0	0	244		
09:45	207	880	181	733	0	0	148	88	0	0	236		
10:00	201	163	0	0	364	20:00	110	496	89	425	0	0	199
10:15	182	187	0	0	369	20:15	104	78	0	0	182		
10:30	188	162	0	0	350	20:30	90	81	0	0	171		
10:45	232	803	181	693	0	0	62	74	0	0	136		
11:00	198	158	0	0	356	20:45	80	336	60	293	0	0	140
11:15	193	192	0	0	385	21:00	73	56	0	0	129		
11:30	221	167	0	0	388	21:15	67	48	0	0	115		
11:45	216	828	204	721	0	0	44	40	0	0	84		
TOTALS	6071	5282			11353	TOTALS	10346	9433			19779		
SPLIT %	53.5%	46.5%			36.5%	SPLIT %	52.3%	47.7%			63.5%		

DAILY TOTALS					NB	SB	EB	WB	Total
					16,417	14,715	0	0	31,132

AM Peak Hour	07:30	07:30			07:30	PM Peak Hour	17:45	16:00			16:15
AM Pk Volume	1277	1106			2383	PM Pk Volume	1303	1229			2482
Pk Hr Factor	0.912	0.881			0.897	Pk Hr Factor	0.931	0.966			0.967
7 - 9 Volume	2335	1945	0	0	4280	4 - 6 Volume	2460	2444	0	0	4904
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:30	16:00			16:15
7 - 9 Pk Volume	1277	1106	0	0	2383	4 - 6 Pk Volume	1273	1229	0	0	2482
Pk Hr Factor	0.912	0.881	0.000	0.000	0.897	Pk Hr Factor	0.959	0.966	0.000	0.000	0.967