

## **Appendix 5**

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*Traffic Impact Analysis*





## MEMORANDUM

Date: August 5, 2016

To: Susanne Huerta, Rincon Consultants

From: Kara Hall & Sarah Brandenburg, Fehr & Peers

**Subject: *Transportation Assessment of 9908 South Santa Monica Boulevard***

*Ref: 2812*

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This memorandum documents the assumptions, methodologies, and findings of a study conducted by Fehr & Peers to evaluate the potential traffic impacts of the proposed development of 9908 South Santa Monica Boulevard (Project). The Project is located at 9900-9916 South Santa Monica Boulevard in Beverly Hills, California and occupies part of the city block bounded by South Santa Monica Boulevard to the west and Charleville Boulevard to the north. The Project will consist of 27 multi-family residential units.

### INTRODUCTION

#### Project Description

The Project would replace the undeveloped lot with 22,000 square feet of residential use. The building would include units ranging from 1 to 4 bedrooms, 4 levels, and basement parking containing 74 spaces for residents and visitors. Access to the project site would be provided by two driveways (one inbound and one outbound) on South Santa Monica Boulevard.

#### Study Scope

The study scenarios and analysis locations are described below.

#### Traffic Scenarios

The study assumes that the Project would be completed by year 2018 and is directed at analyzing the potential Project-generated traffic impacts on the local street system under both existing and future year conditions. The following scenarios have been developed and analyzed as part of this study:

- Existing Conditions – The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes a description of the street system serving the Project site, existing traffic volumes, and an assessment of the operating conditions at the study analysis locations.



- Existing plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of project-generated traffic. The impacts of the proposed Project on existing traffic operating conditions were then identified.
- Future Base (Year 2018) Conditions – Future traffic projections without the proposed Project were developed for the year 2018. The objective of this analysis was to project future traffic growth and operating conditions that could be expected to result from regional growth and related projects in the vicinity of the Project site by the year 2018.
- Future (Year 2018) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of project-generated traffic. The impacts of the proposed Project on future traffic operating conditions were then identified.

### ***Study Analysis Locations***

Provided below is a list of intersections and street segments studied as part of the traffic study. The scope of the traffic analysis and selection of study locations was developed in conjunction with City of Beverly Hills staff based on the potential for Project related impacts.

#### Signalized Intersections Analyzed for Level of Service Impacts:

1. South Santa Monica Boulevard & Charleville Boulevard
2. South Santa Monica Boulevard & Moreno Drive

#### Street Segments Analyzed for Neighborhood Street Segment Impact

1. Charleville Boulevard between South Santa Monica Boulevard and Durant Drive
2. Durant Drive between Moreno Drive and Charleville Boulevard

The two study intersections are signalized; therefore, in accordance with City of Beverly Hills guidelines, the analysis applied the Intersection Capacity Utilization (ICU) level of service (LOS) calculation. In addition, two roadway segments were analyzed for potential neighborhood street segment impacts.

### **EXISTING CONDITIONS**

The assessment of conditions contains a description of the study area, an inventory of the local street system in the vicinity of the Project site, a review of traffic volumes on these facilities, and an assessment of the resulting operating conditions in the study area. A detailed description of these elements is presented in this section.



## **Study Area**

The Project is located at 9908 South Santa Monica Boulevard. The study area includes South Santa Monica Boulevard and Durant Drive from Charleville Boulevard to Moreno Drive, and Charleville Boulevard between South Santa Monica Boulevard and Durant Drive.

## **Existing Street System**

### ***North-South Streets***

- **Charleville Boulevard** runs along the north boundary of the project site. Charleville Boulevard provides one lane in each direction, and limited parking is permitted within the study area.  
**Moreno Drive** runs along the west boundary of the study area. Moreno Drive provides one lane in each direction and parking is not permitted in the study area.

### ***East-West Streets***

- **South Santa Monica Boulevard** runs along the northern boundary of the project site. It is a commercial street within in the study area with two lanes in each direction, and limited metered parking is permitted.

## **Existing Bicycle and Pedestrian Facilities**

There are no bicycle facilities in the study area. Sidewalks are provided along South Santa Monica Boulevard, Charleville Boulevard, Durant Drive, and Moreno Drive. Crosswalks are provided on at least two approaches at all intersections in the study area.

## **Existing Traffic Volumes and Level of Service**

This section presents existing base peak hour traffic volumes, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each, indicating volume-to-capacity (V/C) ratios and LOS.

### ***Existing Base Traffic Volumes***

Weekday AM and PM peak hour turning movements at the two study intersections, and 24-hour machine counts at the two analyzed street segments were collected on February 3, 2016. Existing volumes and lane configurations are shown in Figure 1. Traffic count data from the intersections and street segments are contained in Appendix B. Traffic counts were collected from 7:00 – 9:00 AM and 4:00 – 6:00 PM.

### ***Level of Service Methodology***

LOS is a qualitative measure used to describe the condition of traffic flow on the street system, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. According to



*Beverly Hills Traffic Thresholds of Significance* (Planning Commission of the City of Beverly Hills, October 2010), this study is required to use the Intersection Capacity Utilization (ICU) method of intersection capacity calculation to analyze signalized intersections. A LOS was assigned to each signalized intersection based on V/C ratios as described in Table 1.

**TABLE 1: LOS DEFINITIONS FOR SIGNALIZED INTERSECTIONS**

LOS	DESCRIPTION	VOLUME-TO-CAPACITY (V/C) RATIO
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	0.000-0.600
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.601-0.700
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701-0.800
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.801-0.900
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901-1.000
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 1.000

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, Transportation Research Board, 1980.

A peak hour factor was applied to both the existing and future year analysis scenarios to account for fluctuations in traffic flows throughout the peak travel hours. The application of a peak hour factor of 0.85 under existing conditions and 0.90 under cumulative conditions was found to produce LOS results that more closely matched current travel conditions in the study area. Without the peak hour factor, LOS results would be better than those observed in the study area and would not reflect the actual peak hour conditions experienced by drivers.



**Existing Levels of Service**

Existing operating conditions based on the methodologies above are shown in Table 2.

**TABLE 2: EXISTING (2016) INTERSECTION LOS ANALYSIS**

NO.	INTERSECTION	CONTROL	PEAK HOUR	EXISTING (2016)	
				V/C	LOS
1	S. Santa Monica Boulevard & Charleville Boulevard	SIGNAL	AM	0.556	A
			PM	0.762	C
2	S. Santa Monica Boulevard & Moreno Drive	SIGNAL	AM	0.651	B
			PM	0.768	C

Source: Fehr & Peers, 2016.

**TRAFFIC PROJECTIONS**

**Project Traffic**

The development of trip generation estimates for the proposed Project is a three-step process: trip generation, trip distribution, and traffic assignment.

**Project Trip Generation**

The Project would add 27 multi-family units to the currently undeveloped site. These units would likely be for-sale condominium units. However, to provide flexibility in the unit type and provide a conservative estimate of vehicle-trip generation, the apartment trip generation rate was applied to the traffic impact study. For comparison purposes, both the condominium and apartment trip generation characteristics are documented. The *Trip Generation Manual, 9<sup>th</sup> Edition* (Institute of Transportation Engineers [ITE], 2012) rates were used to develop the trip generation estimates. Table 3 summarizes the results of the trip generation calculation and the average inbound and outbound trips. As shown, the project would generate 180 daily trips as well as 15 trips in the AM peak hour and 18 trips in the PM peak hour.



**TABLE 3: 9908 S. SANTA MONICA BOULEVARD TRIP GENERATION ESTIMATES**

LAND USE	SIZE	TRIP GENERATION RATES									ESTIMATED TRIP GENERATION						
		ITE CODE	DAILY RATE	AM PEAK HOUR			PM PEAK HOUR			DAILY TRIPS	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS			
				RATE	IN	OUT	RATE	IN	OUT		IN	OUT	TOTAL	IN	OUT	TOTAL	
<b>Proposed Land Use</b>																	
Apartment	27 dwelling units	220	6.65	0.55	29%	71%	0.67	61%	39%	180	4	11	15	11	7	18	
<b>For Comparison Purposes Only - Project Trip Generation with Condominium Units</b>																	
<i>Residential Condominiums</i>	<i>27 dwelling units</i>	<i>230</i>	<i>5.81</i>	<i>0.44</i>	<i>19%</i>	<i>81%</i>	<i>0.52</i>	<i>64%</i>	<i>36%</i>	<i>157</i>	<i>2</i>	<i>10</i>	<i>12</i>	<i>9</i>	<i>5</i>	<i>14</i>	

Source for trip generation rates: *Trip Generation, 9th Edition*, Institute of Transportation Engineers (ITE), 2012. Please note that AM and PM peak hour trips for apartment uses reflect peak hour of apartment complex, which may be higher than the peak hour of adjacent street traffic. This reflects a worst-case scenario for traffic impacts.



### ***Project Traffic Distribution***

The geographic distribution of trips generated by the Project is dependent on characteristics of the street system serving the Project site, the level of accessibility of routes to and from the Project site, and the locations to which patrons of the Project would be visiting. The distribution of project traffic assumes that:

- 45 percent of project traffic will travel through the study intersection of South Santa Monica Boulevard & Charleville Boulevard in the AM and PM Peak Hours as follows:
  - Eastbound South Santa Monica Boulevard Project Trips: 4 in the AM peak hour and 3 in the PM peak hour exiting the project site
  - Westbound South Santa Monica Boulevard Project Trips: 2 in the AM peak hour and 4 in the PM peak hour entering the project site
  - Northbound/Southbound Charleville Boulevard Project Trips: 1 in the AM peak hour exiting the project site and 1 in the PM peak hour entering the project site
- 55 percent of project traffic will travel through the study intersection of South Santa Monica Boulevard & Moreno Drive in the AM and PM Peak Hours
  - Eastbound South Santa Monica Boulevard Project Trips: 2 in the AM peak hour and 6 in the PM peak hour entering the project site
  - Westbound South Santa Monica Boulevard Project Trips: 6 in the AM peak hour and 4 in the PM peak hour exiting the project site

Project trips would not utilize the alley on the southern border of the site to access the project, as no vehicular project access (other than loading or trash service) is proposed from the alley.

### ***Project Traffic Assignment***

The traffic generated by the Project was assigned to the street network based on the expected distribution of Project trips.

### ***Existing Plus Project Traffic Conditions***

Traffic generated by the Project was added to existing traffic volumes to estimate existing plus project traffic forecasts. Figure 2 shows the turning movement traffic volumes for the existing plus project scenario.

### ***Future Traffic Conditions***

To evaluate the potential impacts of the Project on future buildout (Year 2018) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the Project. These forecasts included traffic increases as a result of both



regional ambient traffic growth and traffic generated by specific developments in the vicinity of the Project (related projects). These projected traffic volumes, identified herein as the future base conditions, represent the future study year conditions without the Project. The traffic generated by the Project was then estimated and assigned to the surrounding street system. The Project traffic was added to the future base to form the future plus Project traffic conditions, which were analyzed to determine the incremental traffic impacts attributable to the Project itself.

The assumptions and analysis methodology used to develop each of the future year scenarios discussed above are described in more detail in the following sections.

### ***Future Base Traffic Conditions***

The traffic volumes projected for the future base scenario (Year 2018) take into account the expected changes in traffic over existing conditions from two primary sources: ambient growth due to the effects of overall regional growth and development outside the study area, and traffic generated by specific development projects in, or in the vicinity of, the study area. The methods used to account for these factors are described below.

### ***Background or Ambient Growth***

Based on historic trends and at the direction of City of Beverly Hills staff, it was established that an ambient growth factor of 1% per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by the year 2018. This adjustment was applied to the existing traffic volume data (Year 2016) to reflect the effect of ambient growth by the year 2018.

### ***Cumulative Project Traffic Generation and Assignment***

Future base traffic forecasts include the effects of specific projects, called related projects, which could be developed in the vicinity of the Project. The list of related projects was prepared based on data from the City of Beverly Hills, the City of West Hollywood, and LADOT. A total of 49 cumulative projects were identified in the study area; these projects are listed in Table 4.

### ***Trip Generation***

Trip generation estimates for the related projects were calculated using a combination of previous study findings, publicly available environmental documentation, and the trip generation rates contained in *Trip Generation*, 9th Edition. Table 4 presents the resulting trip generation estimates for these related projects. These projections are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.).



### *Trip Distribution*

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system.

### *Traffic Assignment*

Using the estimated trip generation and trip distribution patterns described above, traffic generated by the related projects was assigned to the street network.

### ***Cumulative Base Traffic Volumes***

Figure 3 shows the future base year 2018 weekday AM and PM peak hour traffic volumes for the analyzed intersections. The future base traffic conditions represent an estimate of future conditions without the Project.

### ***Future Plus Project Traffic Projections***

The Project traffic volumes were added to the year 2018 future base traffic projections, resulting in future plus project AM and PM peak hour traffic volumes. These volumes are shown in Figure 4.



TABLE 4: RELATED PROJECTS TRIP GENERATION

ID	PROJECT LAND USE DESCRIPTION	PROJECT LOCATION	TRIP GENERATION ESTIMATES						
			DAILY	WEEKDAY			WEEKEND		
				AM PEAK HOUR	PM PEAK HOUR	TOTAL	IN	OUT	TOTAL
<b>City of Beverly Hills</b>									
1	15,899 KSF retail shopping center, 26,196 KSF office, 1.8 restaurant <sup>23</sup>	257 North Canon Drive	1,200	57	21	78	48	71	119
2	7.1 KSF Quality Restaurant <sup>17</sup>	246 North Canon Drive	76	2	4	6	5	2	7
3	8 Condominiums <sup>17</sup>	250 North Crescent Drive	550	68	9	77	13	62	75
4	23 Condominiums <sup>17</sup>	9262 Burton Way	205	3	12	15	12	6	18
5	7.8 KSF Post Office, 3.7 KSF Retail, & 88.5 KSF Creative Office <sup>1, 17</sup>	325 North Maple Drive	280	92	16	108	0	72	72
6	35 Condominiums <sup>17</sup>	450-460 North Palm Drive	660	26	18	44	24	30	54
7	16 Condominiums <sup>17</sup>	154-168 North La Peer Drive	146	18	2	20	4	16	20
8	20 Condominiums <sup>17</sup>	425 North Palm Drive	716	35	28	63	27	25	52
9	19.8 KSF Automobile Sales <sup>17</sup>	8955 Olympic Boulevard	206	15	17	32	14	10	24
10	13.3 KSF Office, 1 KSF Fast Food w/o Drive Thru, & 4.7 KSF Variety Store <sup>17</sup>	9212 Olympic Boulevard	522	27	25	52	24	31	55
11	31 Condominiums <sup>17</sup>	332 North Oakhurst Drive	1,309	162	22	184	30	147	177
12	30 Condominiums <sup>17</sup>	305-239 South Elm Drive	157	4	8	12	10	4	14
13	193 Condominiums, 134 Hotel Units, 7.3 KSF Spa, 8.71 KSF Food, 7.3 KSF Bar <sup>24</sup>	One Beverly Hills	2,769	56	59	115	136	102	238
14	1.7 KSF Office <sup>17</sup>	207 South Robertson Boulevard	944	15	10	25	41	44	85
15	31.7 KSF Office <sup>17</sup>	9000 Wilshire Boulevard	(107)	(2)	(1)	(3)	(5)	(5)	(10)
16	21 Apartments, 4 Townhouses, 2.9 KSF Medical Office & 1.9 KSF Retail <sup>2, 17</sup>	8600 Wilshire Boulevard	244	7	12	19	11	13	24
17	37.5 KSF Medical Office, 22.1 KSF Office, 12.5 KSF Retail, & 3 KSF Quality Restaurant <sup>1, 17</sup>	8767 Wilshire Boulevard	2,543	131	33	164	78	151	229
18	53 Condominiums, 5.6 KSF Quality Restaurant, & 8.4 Retail <sup>1, 4, 17</sup>	9200 Wilshire Boulevard	945	0	0	0	0	0	0
19	Jim Falk Lexus Project <sup>5, 5</sup>	9230 Wilshire Boulevard	6,568	47	30	77	23	50	73
20	120 Condominiums, 522 Hotel Rooms, & 12.3 KSF Restaurant <sup>6</sup>	9876 Wilshire Boulevard	649	1	15	16	45	12	57
21	35 KSF Medical-Dental Office Building <sup>17</sup>	121 San Vicente Boulevard	105	13	2	15	3	12	15
<b>City of West Hollywood</b>									
22	Mixed-Use <sup>20</sup>	8816 Beverly Boulevard	959	47	18	65	31	54	85
23	La Peer Hotel <sup>20</sup>	623 La Peer Drive	876	28	24	52	36	32	68
24	Hotel, Restaurant, & Retail <sup>11, 17, 20</sup>	645 Robertson Boulevard	18,412	189	122	311	549	534	1,083
25	Mixed-Use <sup>21</sup>	9001 Santa Monica Boulevard	829	8	16	24	31	16	47
26	Mixed-Use <sup>21</sup>	9040, 9060, 9080, 9098 Santa Monica Boulevard	3,578	193	67	260	123	180	303
<b>City of Los Angeles</b>									
27	483 Condominium <sup>7, 17, 19, 20</sup>	10131 Constellation Boulevard	(1,636)	(37)	85	48	(49)	(105)	(154)
28	West Century City - New Century Plan Project <sup>3, 17</sup>	10250 West Santa Monica Boulevard	5,922	(235)	58	(177)	290	74	364
29	Museum of Tolerance Expansion <sup>11, 17, 19</sup>	9786 West Pico Boulevard	1,713	139	103	242	131	118	249
30	YULA Boys High School Expansion <sup>11, 11, 17</sup>	9760 West Pico Boulevard	820	99	65	164	35	64	99
31	Century Plaza Mixed Use Development <sup>12, 17, 19, 20</sup>	2025 South Avenue of the Stars	(826)	69	12	81	(8)	131	123
32	Bellwood Avenue Senior Care & Medical Office Project <sup>18, 19</sup>	10330 West Bellwood Avenue	958	(16)	(6)	(22)	(15)	(12)	(27)
33	283 Condominiums <sup>17, 19, 22</sup>	10000 West Santa Monica Boulevard	1,189	18	78	96	67	41	108
34	71.7 KSF New Retail & Renovation of the Century City (Westfield) Shopping Center <sup>18, 19</sup>	10250 West Santa Monica Boulevard	1,350	13	13	26	72	72	144
35	Century City Center Project <sup>14, 19</sup>	1950 South Avenue of the Stars	3,404	393	21	414	33	337	370
36	32 Apartments <sup>18, 19</sup>	888 South Devon Avenue	213	9	7	16	8	8	16
37	140 Condominiums <sup>15, 17, 19</sup>	300 South Wetherly Drive	270	3	17	20	16	6	22
38	Cedars-Sinai Medical Center Project - West Tower (New medical building with 100 hospita	8723 West Alden Drive	1,181	79	34	113	47	83	130
<b>TOTAL RELATED PROJECT TRIPS</b>			<b>59,899</b>	<b>1,776</b>	<b>1,156</b>	<b>2,932</b>	<b>1,940</b>	<b>2,628</b>	<b>4,568</b>

Notes

- <sup>1</sup> Daily, AM peak hour, PM peak hour, and Saturday MD peak hour trip generation estimates were provided by City of Beverly Hills staff unless noted otherwise (August 2015).
- <sup>2</sup> Daily, AM peak hour, and PM peak hour trip generation estimates were provided by City of West Hollywood staff unless noted otherwise (October 2015).
- <sup>3</sup> The total net new trip generation estimates for the daily, AM peak hour, and PM peak hour were provided by Los Angeles Department of Transportation staff unless noted otherwise (August 2015).
- <sup>4</sup> AM and PM peak hour trip estimates were obtained from the *Beverly Hills Post Office Traffic Impact Analysis* (Fehr & Peers, 2015).
- <sup>5</sup> Daily trip estimates and AM, PM, and Saturday MD peak hour trip estimates were obtained from the *Traffic Study for the 8600-8612 Wilshire Mixed-Use Project* (Kaku Associates, 2005).
- <sup>6</sup> Daily trip estimates and AM, PM, and Saturday MD peak hour trip estimates were obtained from the *8767 Wilshire Boulevard - Supplemental Updated Traffic Impact Analysis* (Fehr & Peers, 2013).
- <sup>7</sup> Daily trip estimates and AM, PM, and Saturday MD peak hour trip estimates were obtained from the Option 1 trip generation provided in the *Traffic Study for the 9200 Wilshire Mixed-Use Project Beverly Hills* (Fehr & Peers, 2005).
- <sup>8</sup> All peak hour trip estimates were obtained from the *Traffic and Parking Study for the Beverly Hills Lexus Expansion Project* (Fehr & Peers, 2010).
- <sup>9</sup> All net new trip estimates were obtained from the *Traffic Study for Beverly Hills Revitalization Plan* (Fehr & Peers, 2007).
- <sup>10</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Traffic Study for 10131 Constellation Boulevard Residential Project* (Kaku Associates, 2005).
- <sup>11</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Traffic Impact Analysis Report of the Bellwood Avenue Residential* (Hirsch/Green Transportation Consulting, 2007).
- <sup>12</sup> Daily trip estimates and AM, PM, and Saturday MD peak hour trip estimates were obtained from the *Traffic Impact Study for Westfield Century City New Century Plan* (Linscott, Law, & Greenspan, 2007).
- <sup>13</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Traffic Assessment for the Proposed Expansion Project of the Museum of Tolerance Located at 9786 West Pico Boulevard* (City of Los Angeles, 2008).
- <sup>14</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *YULA Boys High School Expansion - Recirculated Traffic/Transportation/Parking Chapter* (Crain & Associates, 2009).
- <sup>15</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the Option B trip generation provided in the *Century Plaza Mixed Use Development Environmental Impact Report* (City of Los Angeles, 2011).
- <sup>16</sup> Due to the type of uses it was assumed that the Saturday MD peak hour trips generated by the project would be negligible.
- <sup>17</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Transportation Study for the Century City Center Project* (Gibson Transportation Consulting, 2012).
- <sup>18</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Revised Traffic Impact Analysis for the Proposed Residential Development Located at 300 South Wetherly Drive* (City of Los Angeles, 2008).
- <sup>19</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Traffic Impact Study for Cedars-Sinai Medical Center Project* (Linscott, Law, & Greenspan, 2008).
- <sup>20</sup> Weekday MD peak hour trips were estimated using the approach used in the *Traffic Study for 9900 Wilshire Project* (Fehr & Peers, 2007), where a factor was applied to the total PM peak hour trips to yield the total MD peak hour trips. Both the factors and in/out split
- <sup>21</sup> AM and PM peak hour trip generation and directional distribution estimates were developed based on *Trip Generation, 9th Edition* (ITE, 2012).
- <sup>22</sup> Saturday MD peak hour trip generation and directional distribution estimates were developed based on *Trip Generation, 9th Edition* (ITE, 2012).
- <sup>23</sup> Due to limited information, Saturday MD peak hour trip generation estimates were assumed to be similar to PM peak hour trip generation estimates.
- <sup>24</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Revised Traffic Impact Analysis for the Melrose Triangle Project* (LSA, 2013).
- <sup>25</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *Revised Traffic Assessment for the Proposed Residential Project at 10000 West Santa Monica Boulevard* (City of Los Angeles, 2011).
- <sup>26</sup> All net new trip estimates were obtained from the *257 N. Canon Drive Traffic Impact Study* (Overland Traffic Consultants, 2009).
- <sup>27</sup> Daily trip estimates and AM and PM peak hour trip estimates were obtained from the *One Beverly Hills Draft Transportation Impact Study Report* (Fehr & Peers, 2015).



## INTERSECTION TRAFFIC IMPACT ANALYSIS

The traffic impact analysis compares the projected LOS at each study intersection under the future base and future plus project conditions to estimate the incremental increase in the V/C ratio and delay caused by the Project. This provides the information needed to assess the potential impact of the Project using significance criteria established by the City of Beverly Hills.

### Criteria for Determination of Significant Traffic Impact

The two signalized intersections are both within the City of Beverly Hills. Significance criteria established by the City was used to assess the potential for significant project impacts at the intersections. The following summarizes the impact criteria for a signalized intersection:

LOS	Final V/C Ratio	Project Related Increase in V/C
D	> 0.801 - 0.900	equal to or greater than 0.030
E or F	> 0.901	equal to or greater than 0.020

### Existing Plus Project Impact Analysis

As shown in Table 5, after applying the City of Beverly Hills significant impact criteria, it is determined that the proposed Project would not significantly impact traffic at the study intersections under existing plus project conditions. No mitigation measures would therefore be required.

**TABLE 5: EXISTING (2016) AND EXISTING PLUS PROJECT INTERSECTION IMPACT ANALYSIS**

NO.	INTERSECTION	CONTROL	PEAK HOUR	EXISTING (2016)		EXISTING + PROJECT		V/C OR DELAY INCREASE	SIGNIFICANT IMPACT?
				V/C	LOS	V/C	LOS		
1	S. Santa Monica Blvd & Charleville Blvd	SIGNAL	AM	0.556	A	0.556	A	0.000	NO
			PM	0.762	C	0.765	C	0.003	NO
2	S. Santa Monica Blvd & Moreno Dr	SIGNAL	AM	0.651	B	0.654	B	0.003	NO
			PM	0.768	C	0.770	C	0.002	NO

Source: Fehr & Peers, 2016.



### Future Plus Project Impact Analysis

As shown in Table 6, after applying the City of Beverly Hills significant impact criteria, it is determined that the proposed Project would not significantly impact traffic at the study intersections under future plus project conditions. No mitigation measures would therefore be required.

**TABLE 6: CUMULATIVE (2018) AND CUMULATIVE PLUS PROJECT INTERSECTION IMPACT ANALYSIS**

NO.	INTERSECTION	CONTROL	PEAK HOUR	CUMULATIVE (2018)		CUMULATIVE + PROJECT		V/C OR DELAY INCREASE	SIGNIFICANT IMPACT?
				V/C	LOS	V/C	LOS		
1	S. Santa Monica Blvd & Charleville Blvd	SIGNAL	AM	0.603	B	0.604	B	0.001	NO
			PM	0.852	C	0.855	D	0.003	NO
2	S. Santa Monica Blvd & Moreno Dr	SIGNAL	AM	0.699	B	0.701	C	0.002	NO
			PM	0.803	D	0.805	D	0.002	NO

Source: Fehr & Peers, 2016.



## NEIGHBORHOOD TRAFFIC IMPACT ANALYSIS

Under the City of Beverly Hills guidelines, a Project would be considered to significantly impact a local residential street if the projected increase in daily traffic volumes is as follows:

<b>Projected Average Daily Traffic with Project (Final ADT)</b>	<b>Project-Related Increase</b>
0 to 2,000	16% or more of final ADT, 16% or more of peak hour, or both
2,001 to 4,000	12% or more of final ADT, 12% or more of peak hour, or both
4,001 to 6,750	8% or more of final ADT, 8% or more of peak hour, or both
6,751 or more	6.25% or more of final ADT, 6.25% or more of peak hour, or both

Daily and peak hour traffic volumes for the existing and proposed future conditions are summarized in Tables 7 and 8, respectively. As shown, no significant impacts are anticipated along the study street segments for the Project. In addition, project trips are not expected to utilize the alley on the southern border of the project site to access the project.



**TABLE 7: NEIGHBORHOOD STREET IMPACT ANALYSIS - EXISTING CONDITIONS**

LOCATION	VOLUME			IMPACT ANALYSIS		
	EXISTING	PROJECT ONLY	EXISTING PLUS PROJECT	% OF FINAL ADT	SIGNIFICANCE THRESHOLD	SIGNIFICANT IMPACT?
<b>Daily</b>						
Charleville Boulevard						
Between S. Santa Monica Blvd and Durant Dr	4,236	8	4,244	0.19%	+8.0%	No
Durant Drive						
Between Moreno Dr and Charleville Blvd	2,772	8	2,780	0.29%	+12.0%	No
<b>Peak Hour</b>						
Charleville Boulevard						
Between S. Santa Monica Blvd and Durant Dr	421	1	422	0.24%	+8.0%	No
Durant Drive						
Between Moreno Dr and Charleville Blvd	405	1	406	0.25%	+12.0%	No

**TABLE 8: NEIGHBORHOOD STREET IMPACT ANALYSIS - CUMULATIVE CONDITIONS**

LOCATION	VOLUME			IMPACT ANALYSIS		
	FUTURE	PROJECT ONLY	FUTURE PLUS PROJECT	% OF FINAL ADT	SIGNIFICANCE THRESHOLD	SIGNIFICANT IMPACT?
<b>Daily</b>						
Charleville Boulevard						
Between S. Santa Monica Blvd and Durant Dr	4,363	8	4,371	0.18%	+8.0%	No
Durant Drive						
Between Moreno Drive and Charleville Blvd	2,855	8	2,863	0.28%	+12.0%	No
<b>Peak Hour</b>						
Charleville Boulevard						
Between S. Santa Monica Blvd and Durant Dr	434	1	435	0.23%	+8.0%	No
Durant Drive						
Between Moreno Drive and Charleville Blvd	417	1	418	0.24%	+12.0%	No



## **REGIONAL TRANSPORTATION SYSTEM IMPACT ANALYSIS**

This section presents an analysis of potential impacts on the regional transportation system. This analysis was conducted in accordance with the procedures outlined in *Congestion Management Program for Los Angeles County* (CMP) (Metro, 2010). The CMP requires that, when an environmental impact report is prepared for a project, traffic and public transit impact analyses be conducted for select regional facilities based on the quantity of Project traffic expected to use those facilities.

### **CMP REGIONAL TRAFFIC IMPACT ANALYSIS**

The CMP guidelines require that the first issue to be addressed is the determination of the geographic scope of the study area. The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed Project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.

#### **Significant Traffic Impact Criteria**

The CMP traffic impact analysis guidelines establish that a significant Project impact occurs when the proposed Project increases traffic demand on a CMP facility by 2% of capacity ( $V/C \geq 0.02$ ), causing LOS F ( $V/C > 1.00$ ).

If the facility is already at LOS F, a significant impact occurs when the proposed Project increases traffic demand on a CMP facility by 2% of capacity ( $V/C \geq 0.02$ ).

#### **Arterial Monitoring Stations**

North Santa Monica Boulevard & Wilshire Boulevard is the only CMP arterial monitoring station within one mile of the Project site. The Project is not expected to add 50 or more vehicle trips during the AM or PM peak hours at this intersection. Therefore, no further arterial review using the CMP criteria is required.

### **SITE ACCESS & ON-SITE CIRCULATION**

Access to the project site would be provided by two driveways (one inbound and one outbound) on South Santa Monica Boulevard. The turning movements at the driveways are summarized below based on the expected trip generation and trip distribution:

- Inbound Driveway: Vehicles would enter the project site from South Santa Monica Boulevard by making an eastbound right-turn (2 vehicles in the AM peak hour and 6



- vehicles in the PM peak hour) or a westbound left-turn (2 vehicles in the AM peak hour and 5 vehicles in the PM peak hour)
- Outbound Driveway: Vehicles would exit the project site onto South Santa Monica Boulevard by making a northbound right-turn (5 vehicles in the AM peak hour and 3 vehicles in the PM peak hour) or a northbound left-turn (6 vehicles in the AM peak hour and 4 vehicles in the PM peak hour)

Passenger pick-up and drop-off trips would occur within the loading area in the northern portion of the project site accessed by the two proposed driveways on South Santa Monica Boulevard. Project trips would not utilize the alley on the southern border of the site to access the project. However, trash collection and moving trucks/vans would utilize the alley for project access.

Based on a review of the project site plan, a water feature would be placed between the inbound and outbound driveways. The driveways serving the project site are on South Santa Monica Boulevard with adjacent commercial and retail uses. Consequently, pedestrian activity regularly occurs along the corridor, including the sidewalk along the frontage of the project site. To ensure that vehicles exiting the project site can safely cross the sidewalk area, the following is recommended:

- Prior to constructing the water feature or other project features (such as walls or landscaping) adjacent to the project driveways, the City Traffic Engineer shall review the proposed design to ensure that the site distance for vehicles exiting the project site meets the applicable site distance standards. Pedestrian warning indicators may be required based on the available site distance.

## **PARKING**

The Project would provide one level of underground parking containing bike storage and a total of 74 parking spaces for residents and guests. Parking would include 3 accessible spaces, 43 standard single spaces, 11 tandem spaces (vehicles are positioned behind a single space), and 17 stacker spaces (a vehicle is positioned above or below another parking space and is accessed by an elevating device).

As discussed in the existing conditions section above, South Santa Monica Boulevard currently has on-street metered parking. Access to the project site at the two driveways on South Santa Monica Boulevard would result in the removal of metered on-street parking spaces.



## **SUMMARY AND CONCLUSIONS**

This study analyzes the potential traffic impacts of the proposed development at 9908 South Santa Monica Boulevard in Beverly Hills. The following summarizes the results of this analysis:

- The Project would replace the existing vacant lot with 27 multi-family residential units.
- The project would include a driveway to provide access to and from the site on South Santa Monica Boulevard.
- The Project is expected to generate a net total of 180 daily trips, including 4 inbound and 11 outbound during the AM Peak Hour, and 11 inbound and 7 outbound during the PM Peak Hour.
- The LOS analysis for the existing plus project scenario (using the Beverly Hills significance criteria) determined that the Project would not significantly impact traffic either study intersection.
- The LOS analysis for the cumulative plus project scenario (using the Beverly Hills significance criteria) determined that the Project would not significantly impact traffic either study intersection.
- The Project would not significantly impact either of the neighborhood street segments analyzed.
- The project would not significantly impact traffic at the closest CMP arterial intersection.
- Prior to constructing the water feature or other project features (such as walls or landscaping) adjacent to the project driveways, the City Traffic Engineer shall review the proposed design to ensure that the site distance for vehicles exiting the project site meets the applicable site distance standards. Pedestrian warning indicators may be required based on the available site distance.
- Access to the project site at the two driveways on South Santa Monica Boulevard would result in the removal of metered on-street parking spaces.



## REFERENCES

*2010 Highway Capacity Manual*, Transportation Research Board, 2010.

*Congestion Management Program for Los Angeles County*, Metro, 2010.

*Beverly Hills Traffic Thresholds of Significance* (Planning Commission of the City of Beverly Hills, October 2010)

*Institute of Transportation Engineers (ITE) Trip Generation, 9<sup>th</sup> Edition*

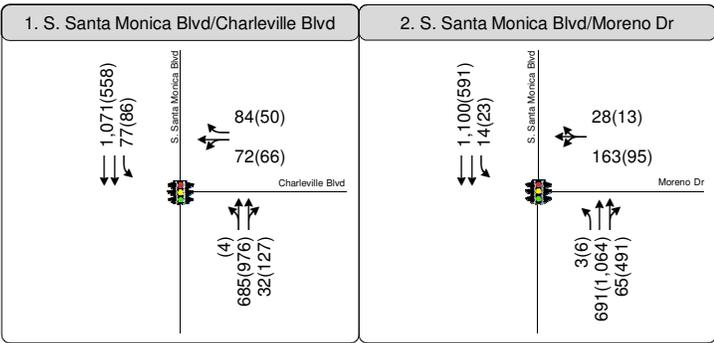
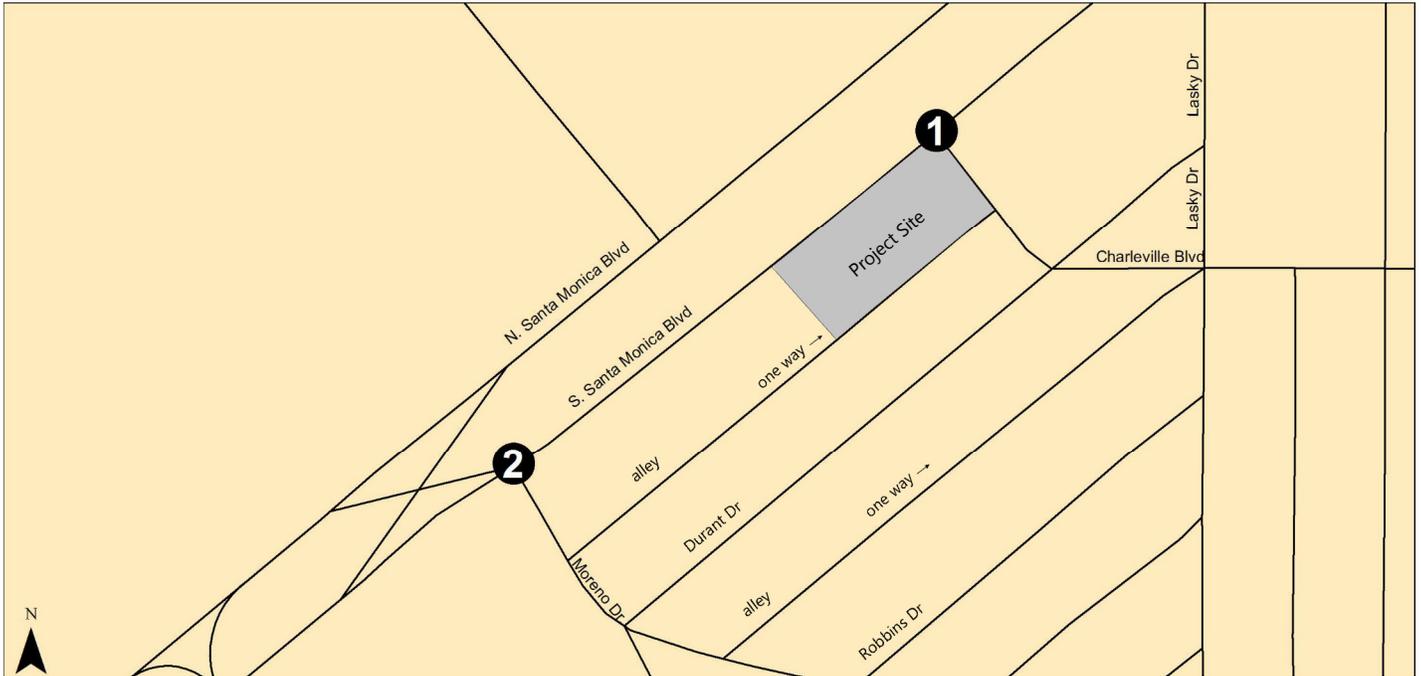


Figure 1  
Existing (2016) Peak Hour Traffic Volumes  
and Lane Configurations  
AM(PM)



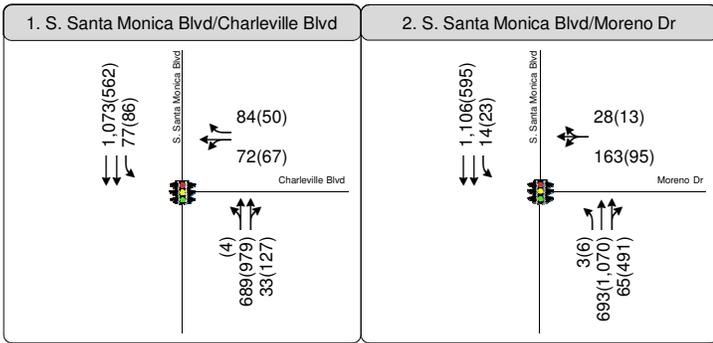
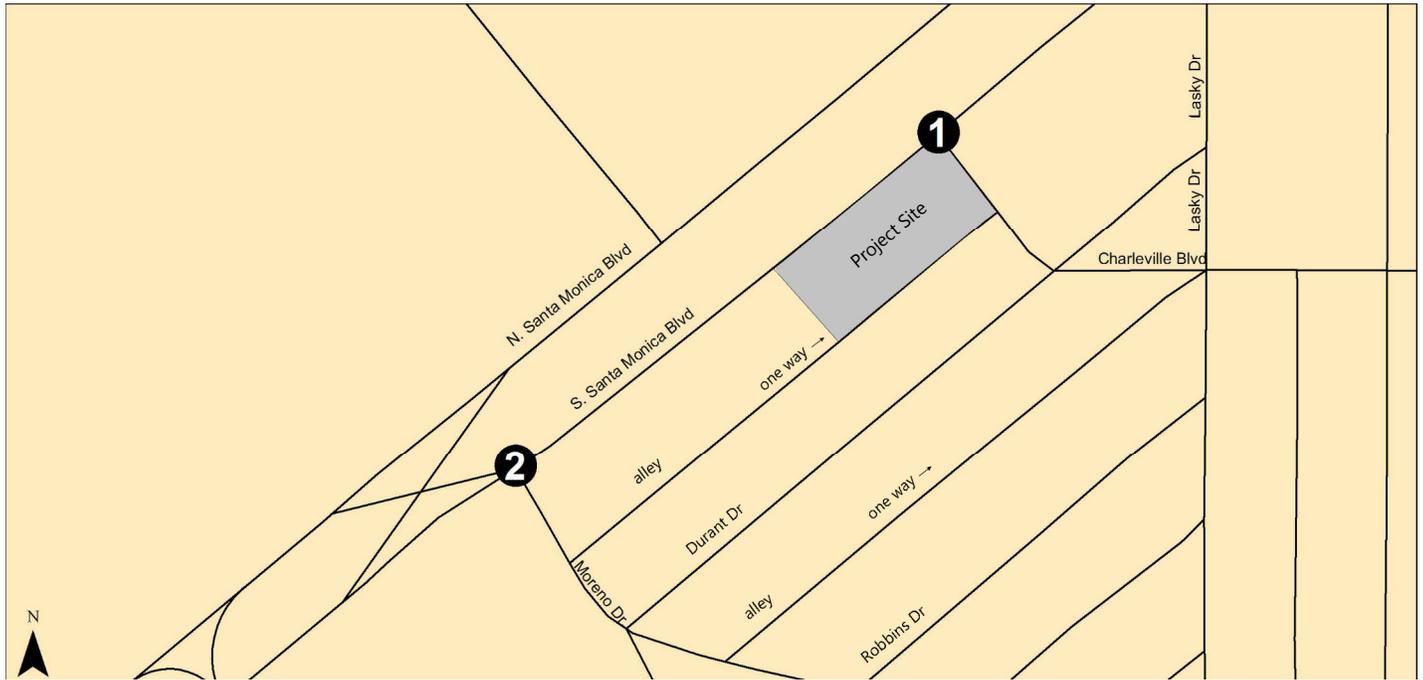


Figure 2  
Existing (2016) Plus Project Peak Hour Traffic Volumes  
and Lane Configurations  
AM(PM)



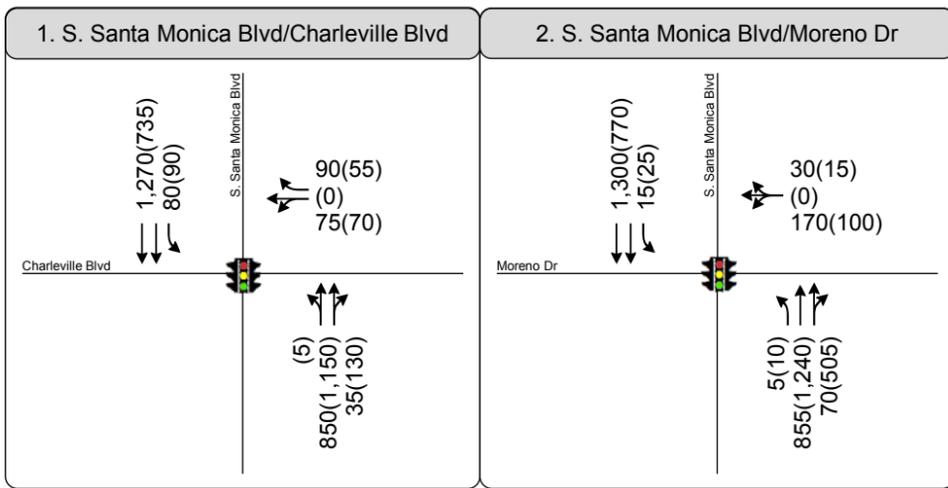
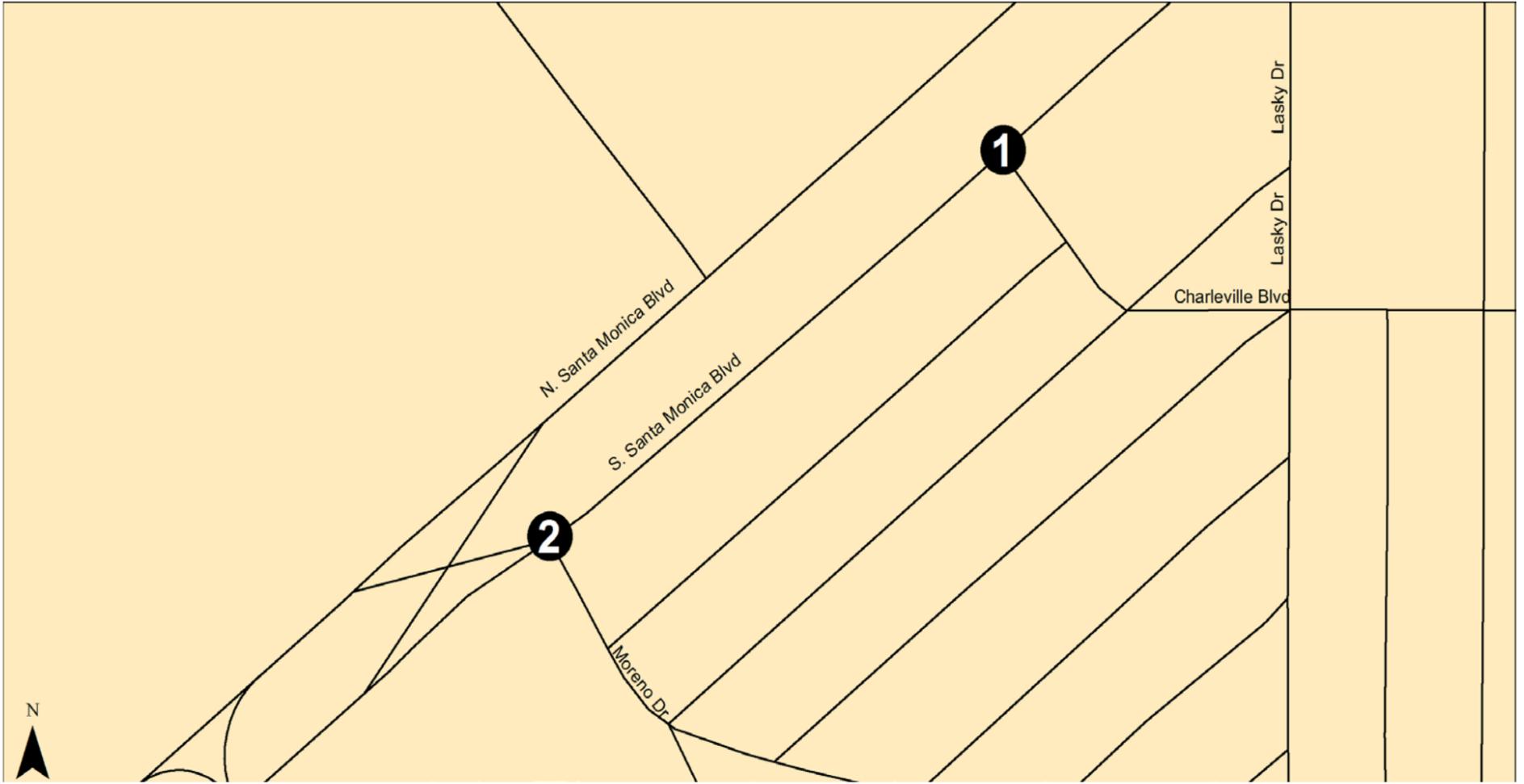
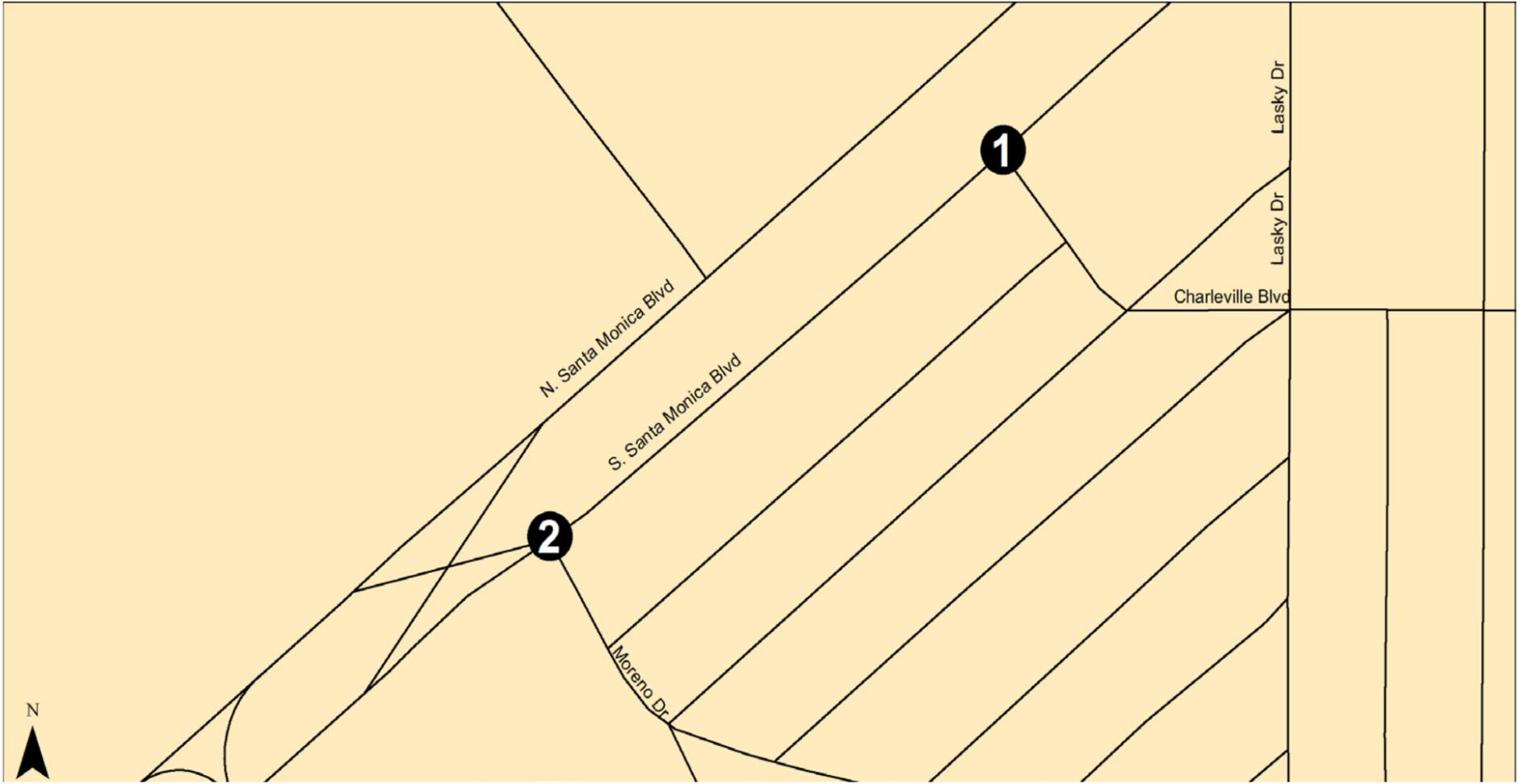


Figure 3  
 Cumulative (2018) Peak Hour Traffic  
 Volumes and Lane Configurations  
 AM(PM)





1. S. Santa Monica Blvd/Charleville Blvd	2. S. Santa Monica Blvd/Moreno Dr
<p>           S. Santa Monica Blvd            Charleville Blvd            1,272(739)            80(90)            90(55)            (0)            75(71)            (5)            854(1,153)            36(130)         </p>	<p>           S. Santa Monica Blvd            Moreno Dr            1,306(774)            15(25)            30(15)            (0)            170(100)            5(10)            857(1,246)            70(505)         </p>

Figure 4  
 Cumulative (2018) Plus Project Peak Hour  
 Traffic Volumes and Lane Configurations  
 AM(PM)



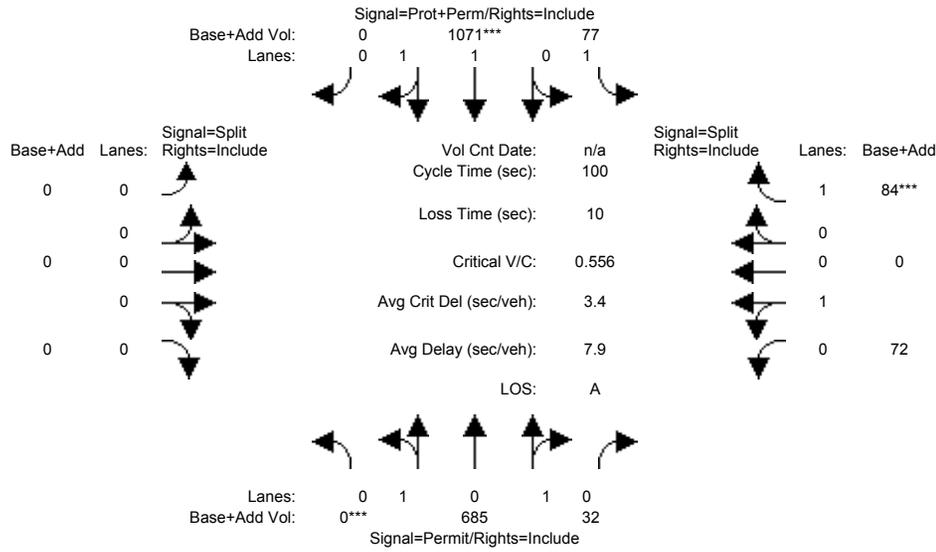


## **APPENDIX A: TECHNICAL CALCULATIONS**

Existing Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

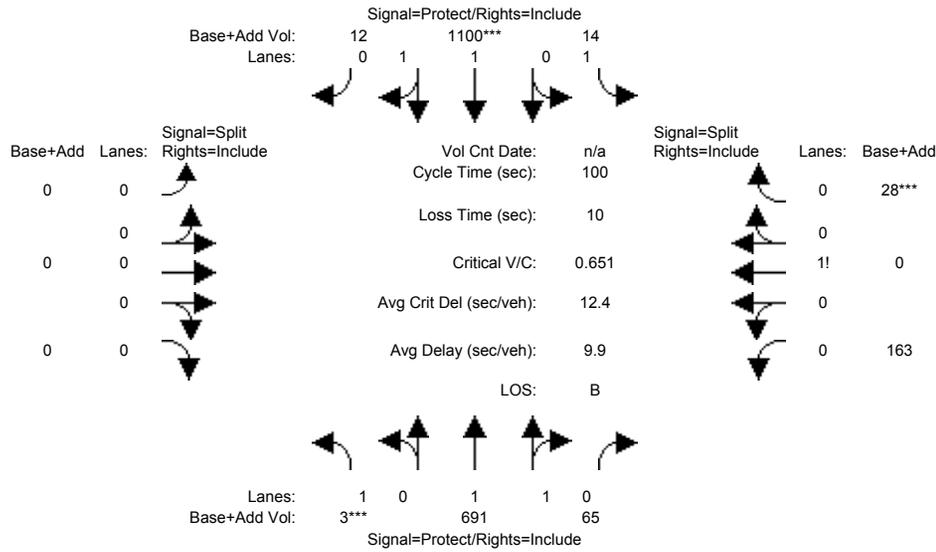
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Existing Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

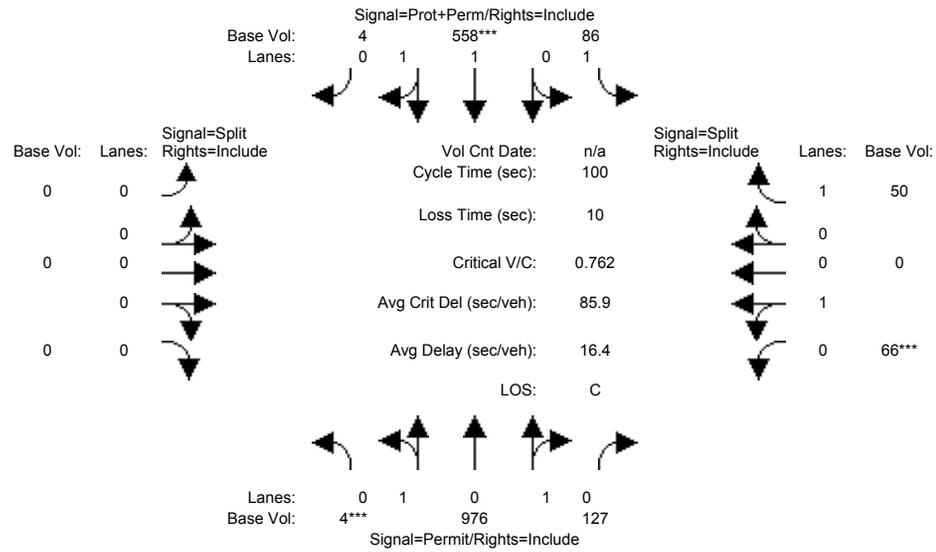
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Existing Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)

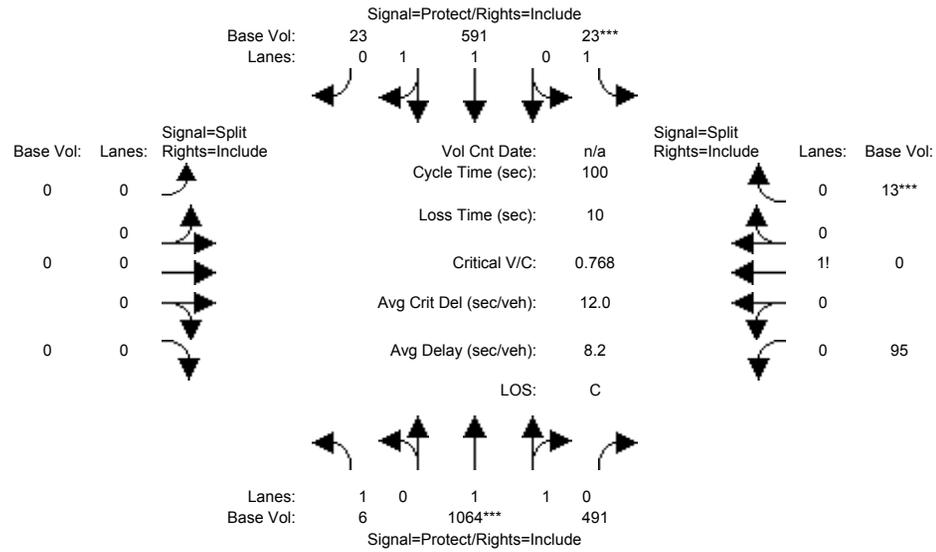
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Existing Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)

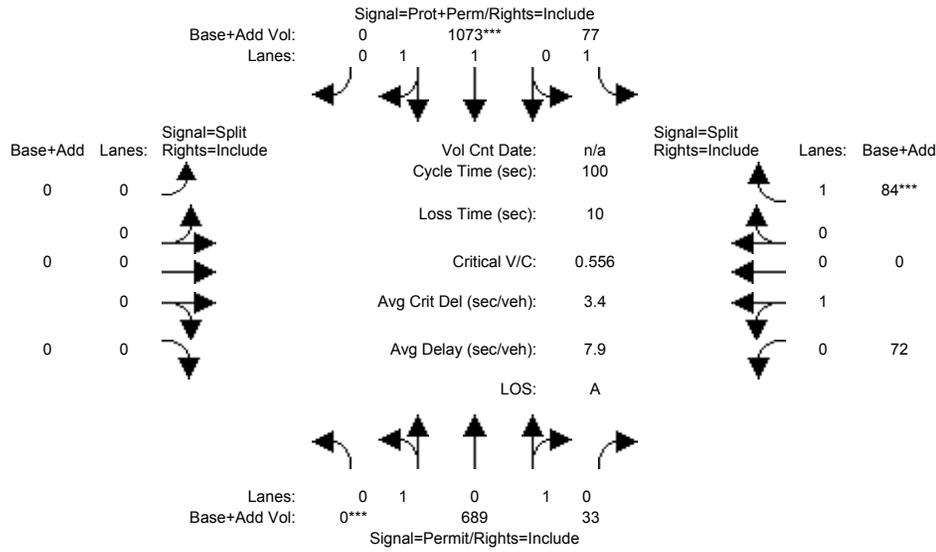
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Existing plus Project Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

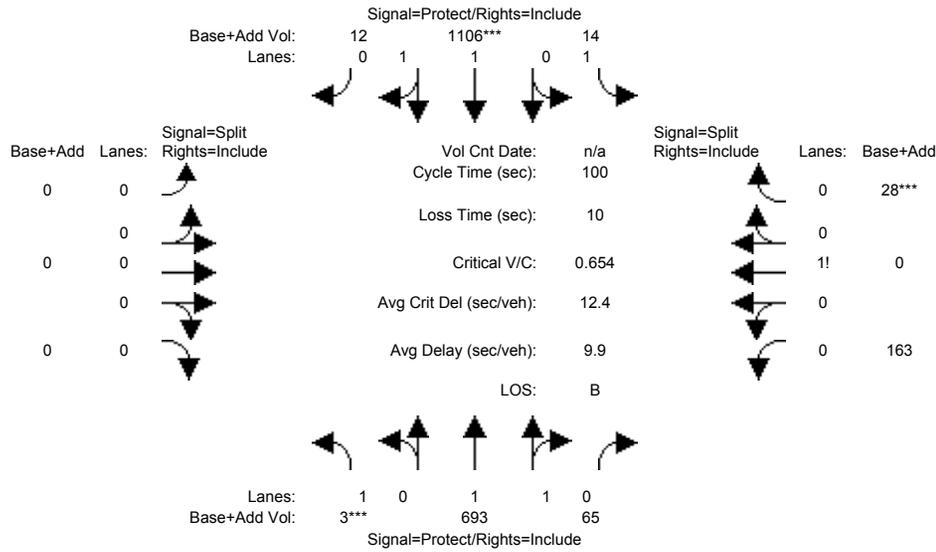
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Existing plus Project Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1 (Loss as Cycle Length %) (Future Volume Alternative)

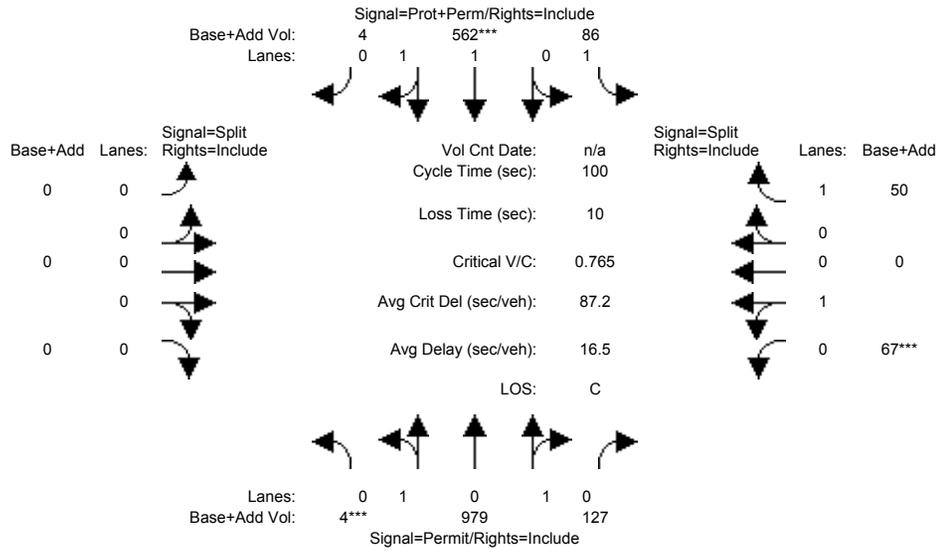
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Existing plus Project Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

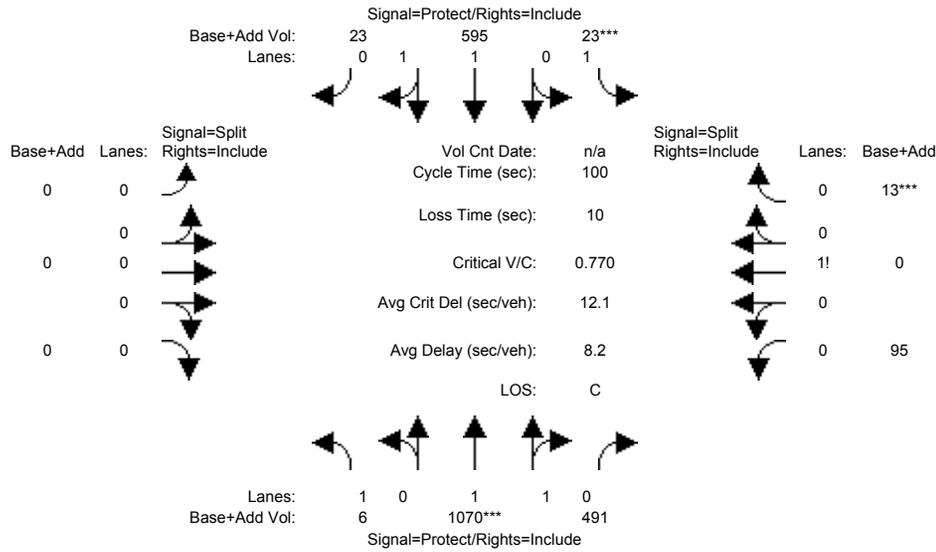
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Existing plus Project Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1 (Loss as Cycle Length %) (Future Volume Alternative)

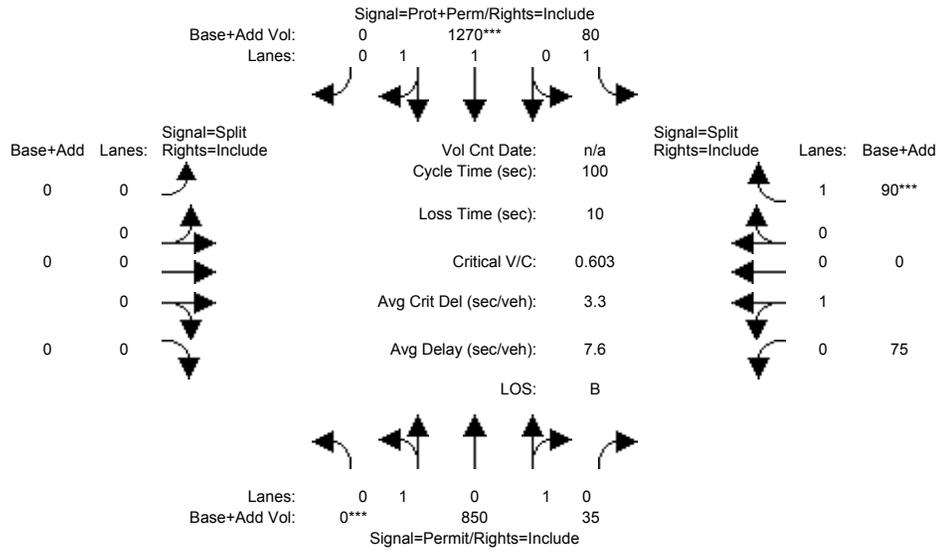
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Cumulative Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

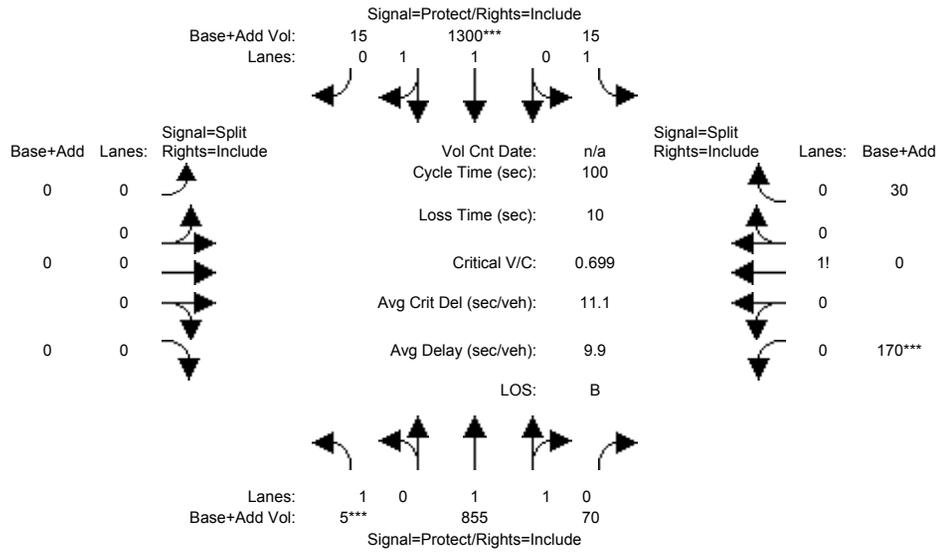
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Cumulative Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1 (Loss as Cycle Length %) (Future Volume Alternative)

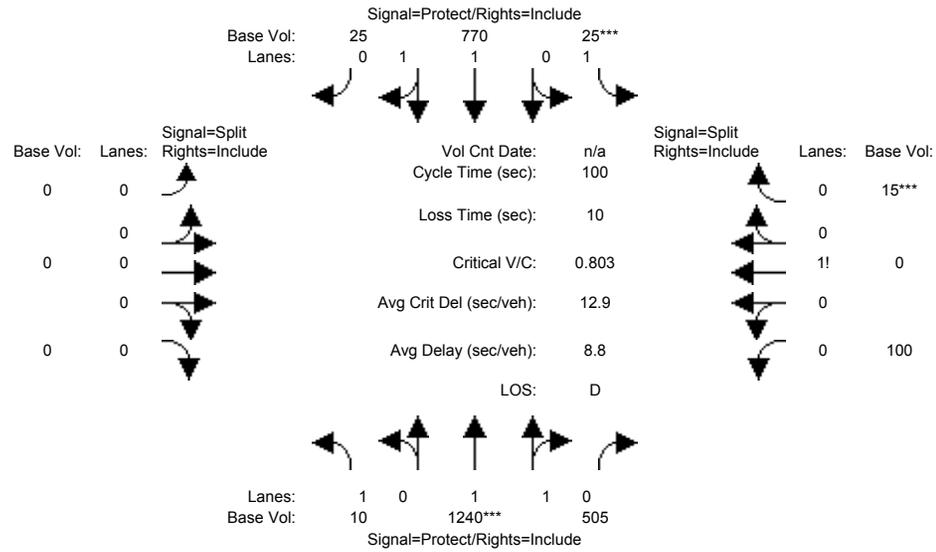
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Cumulative Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)

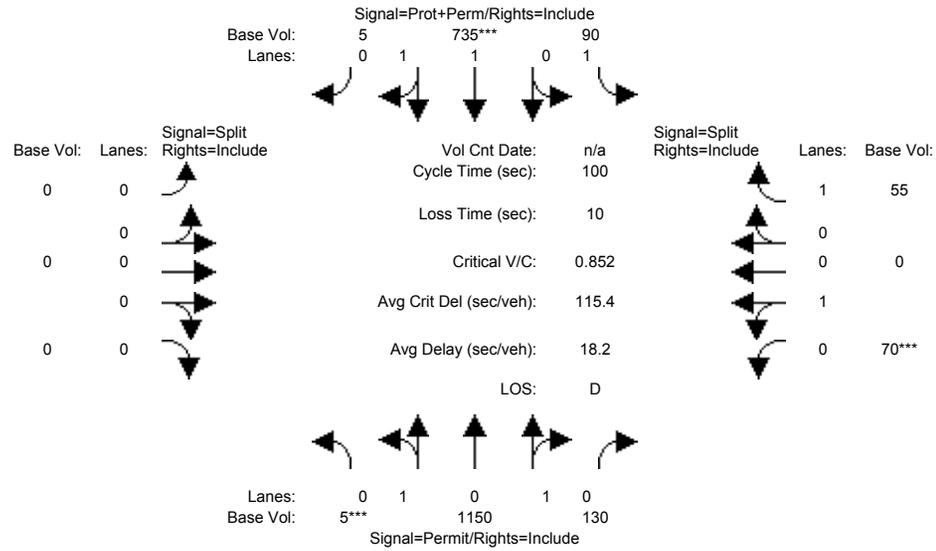
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Cumulative Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)

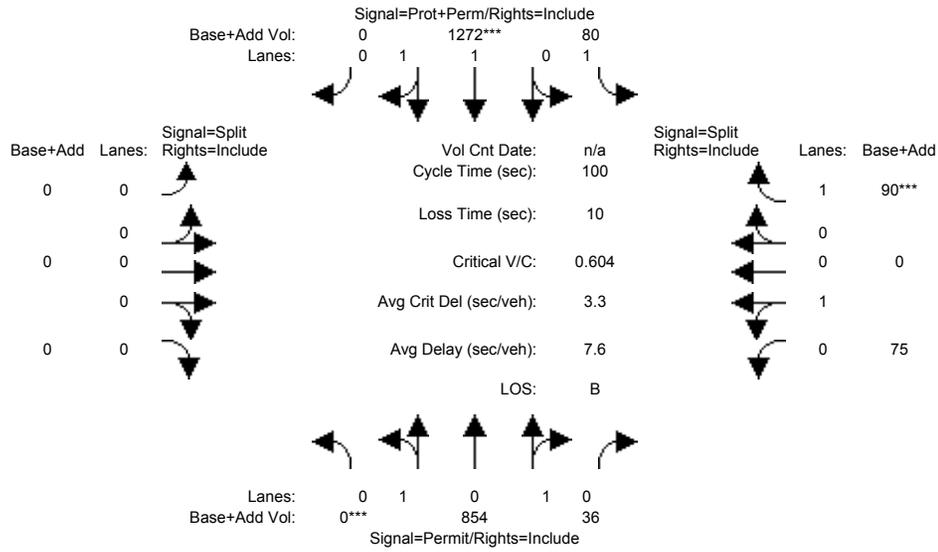
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Cumulative plus Project Conditions - AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

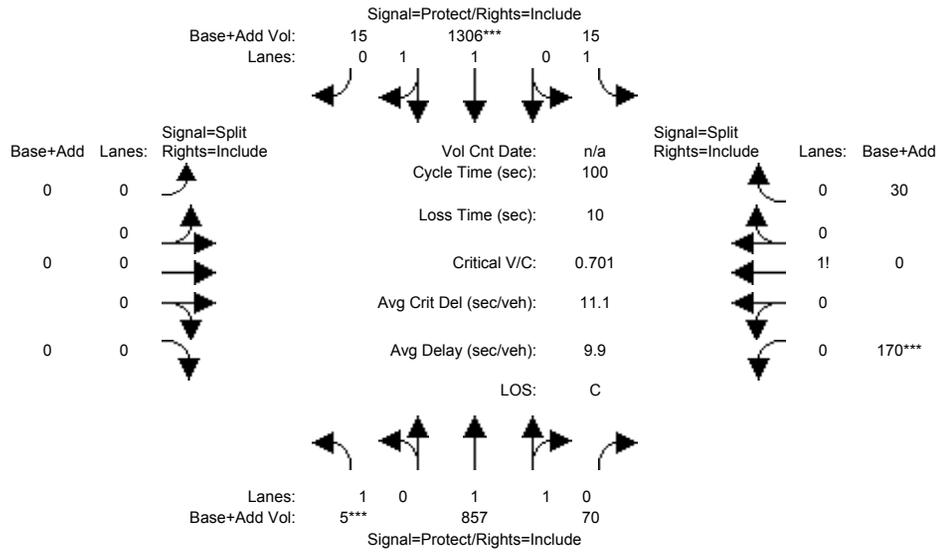
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Cumulative plus Project Conditions- AM Peak Hour

Detailed Scenario Comparison Report  
ICU 1 (Loss as Cycle Length %) (Future Volume Alternative)

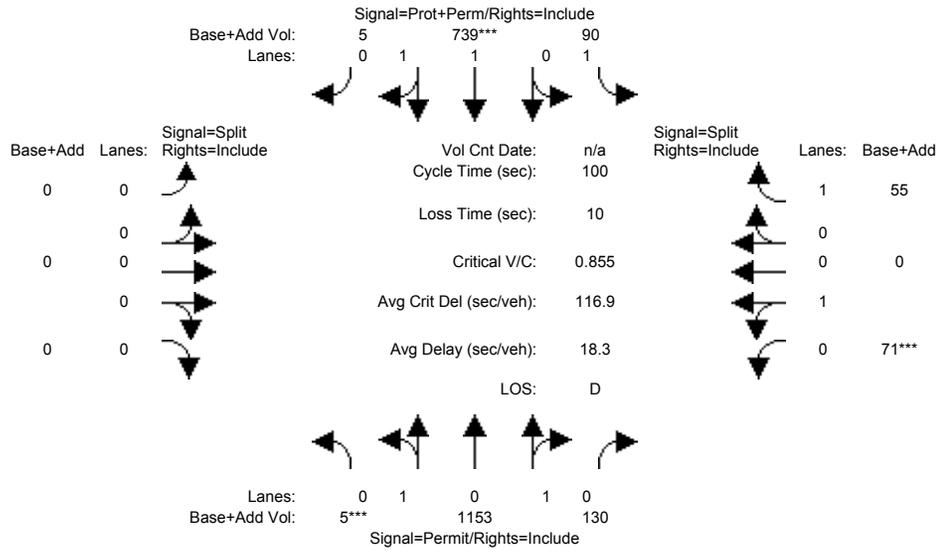
Intersection #100: S. Santa Monica Blvd/Moreno Dr.



Cumulative plus Project Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

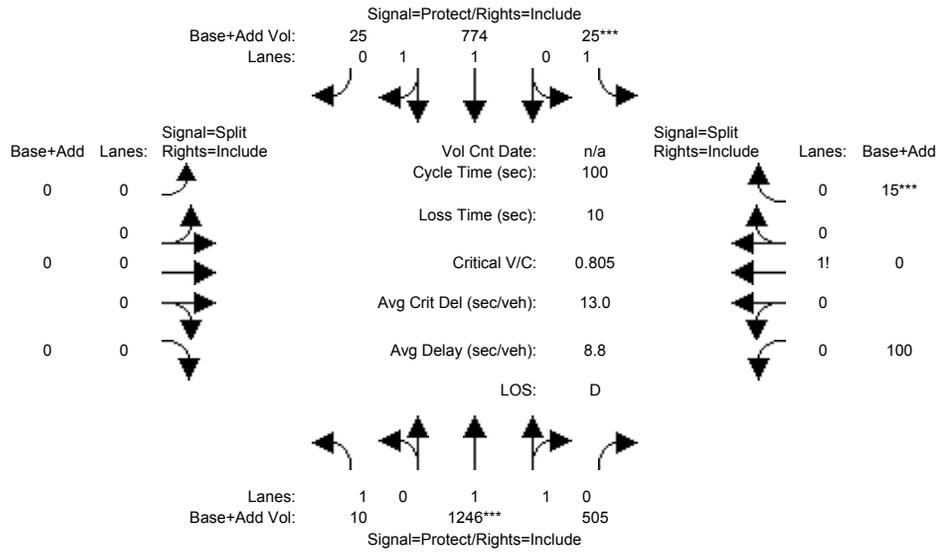
Intersection #538: S. Santa Monica Blvd/Charleville Blvd



Cumulative plus Project Conditions - PM Peak Hour

Detailed Scenario Comparison Report  
ICU 1 (Loss as Cycle Length %) (Future Volume Alternative)

Intersection #100: S. Santa Monica Blvd/Moreno Dr.





## **APPENDIX B: TRAFFIC COUNTS**

# ITM Peak Hour Summary

Prepared by:

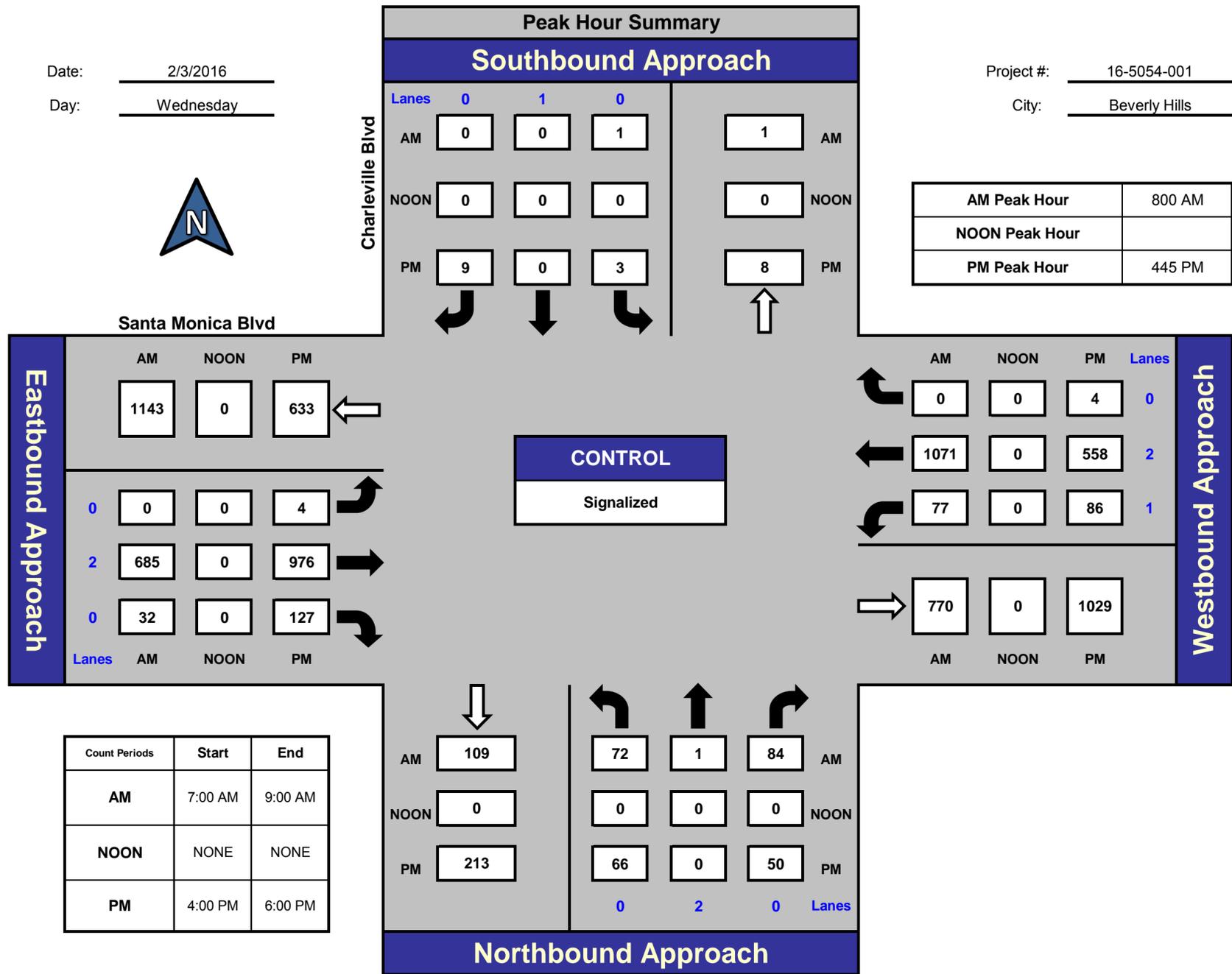


National Data & Surveying Services

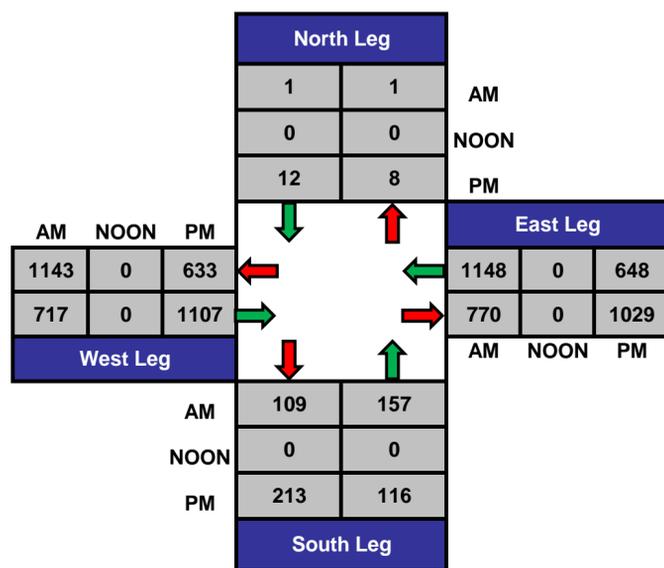
## Charleville Blvd and Santa Monica Blvd, Beverly Hills

Date: 2/3/2016  
Day: Wednesday

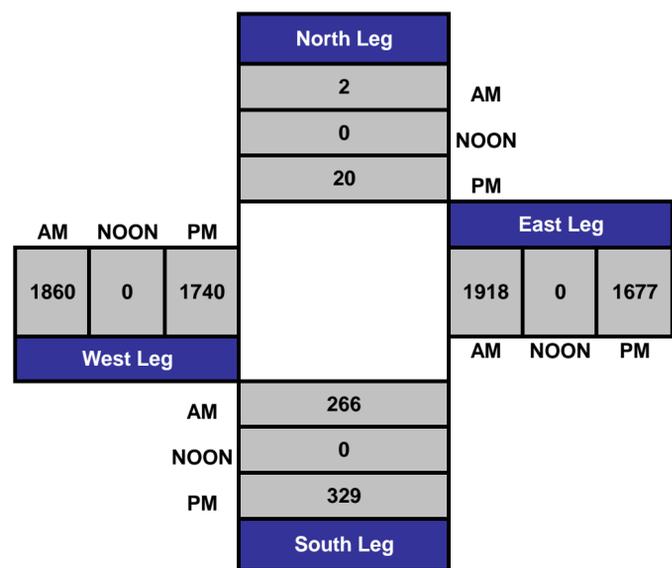
Project #: 16-5054-001  
City: Beverly Hills



### Total Ins & Outs



### Total Volume Per Leg



# ITM Peak Hour Summary

Prepared by:

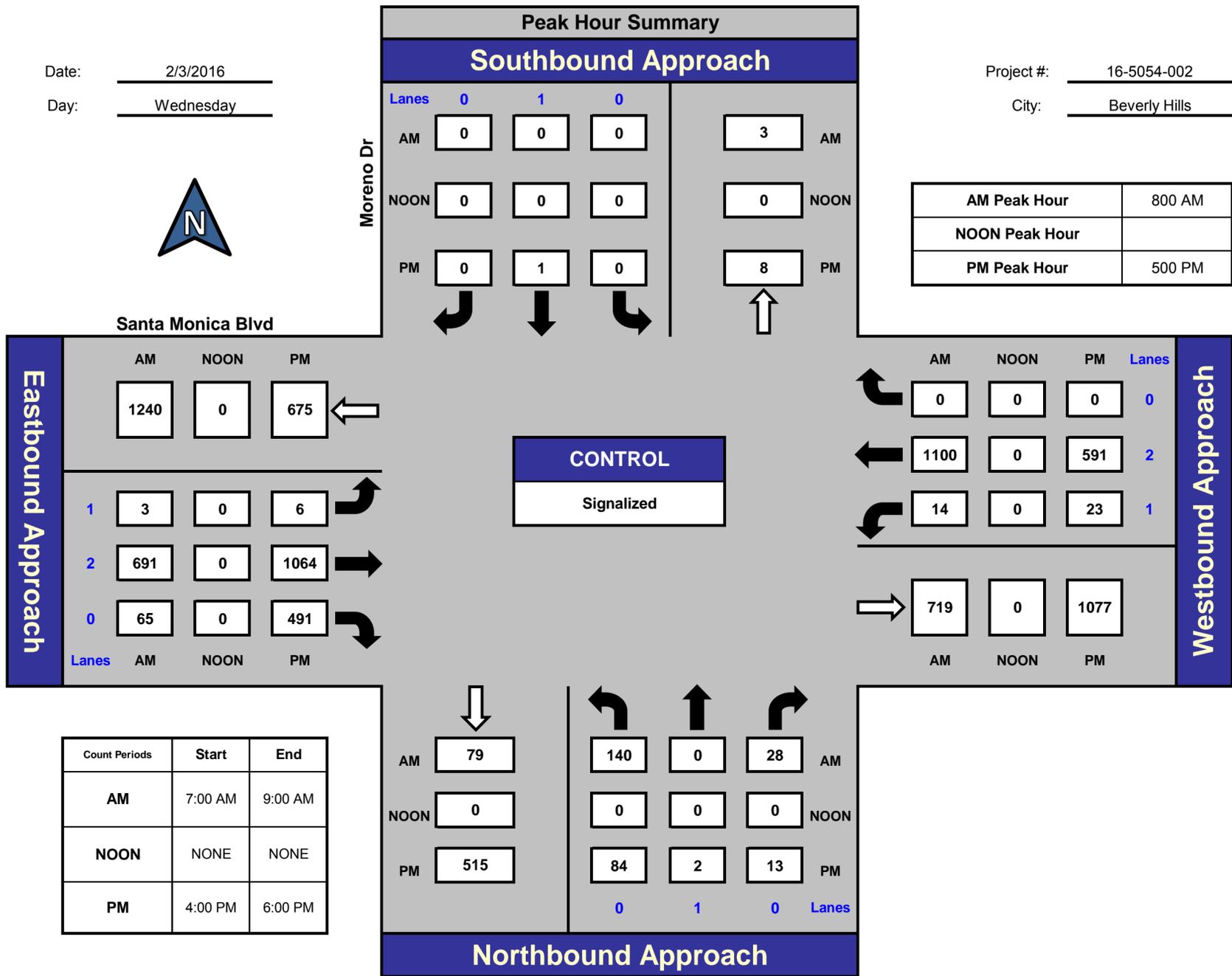


National Data & Surveying Services

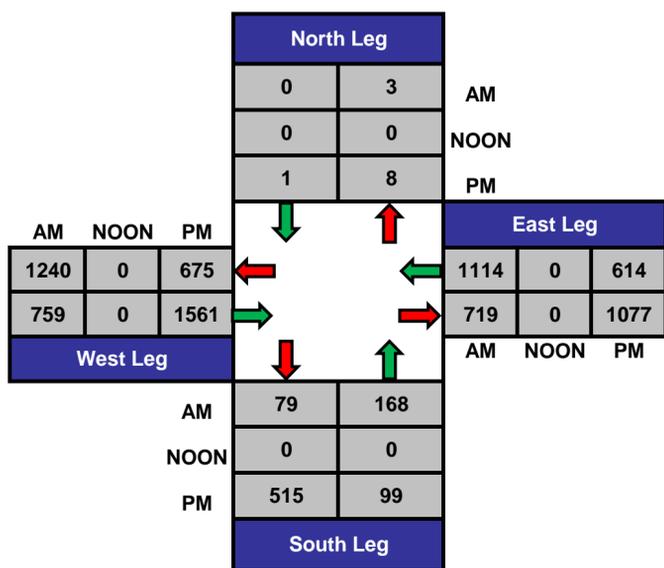
## Moreno Dr and Santa Monica Blvd, Beverly Hills

Date: 2/3/2016  
Day: Wednesday

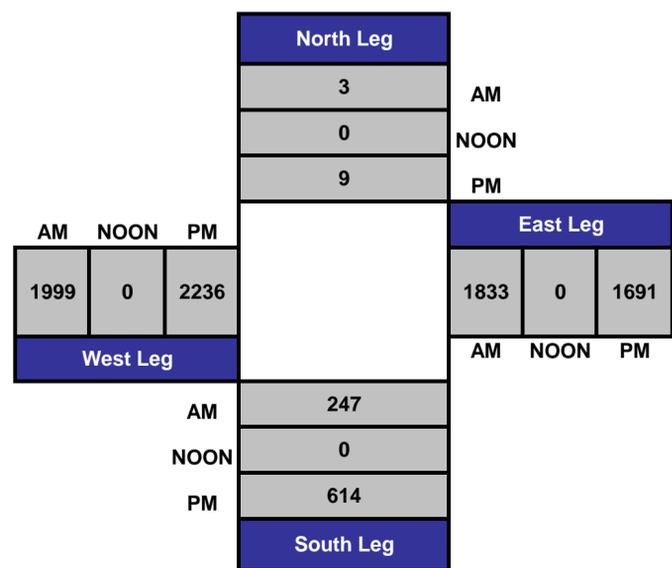
Project #: 16-5054-002  
City: Beverly Hills



### Total Ins & Outs



### Total Volume Per Leg



# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

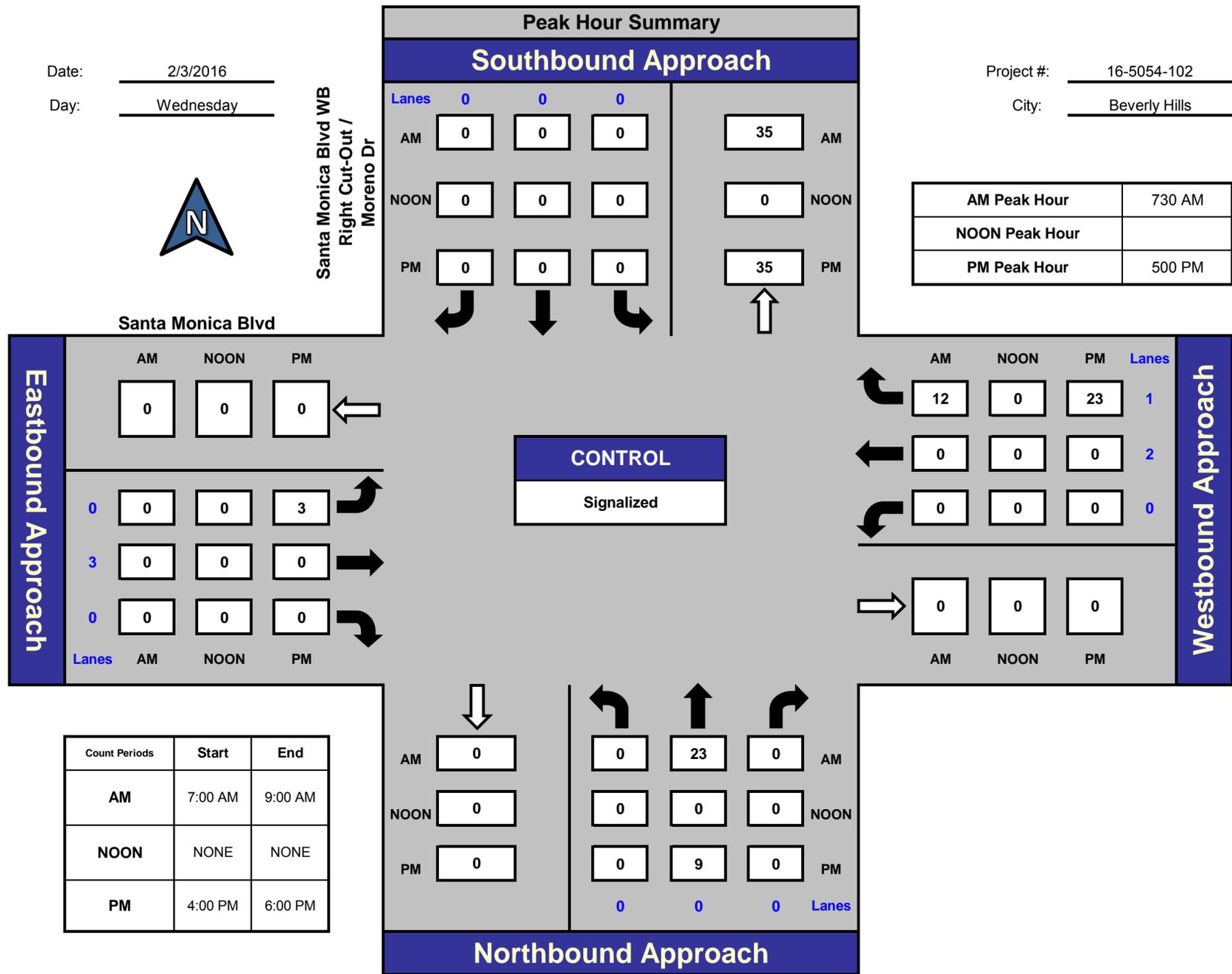
## Santa Monica Blvd WB Right Cut-Out / Moreno Dr and Santa Monica Blvd , Beverly Hills

Date: 2/3/2016

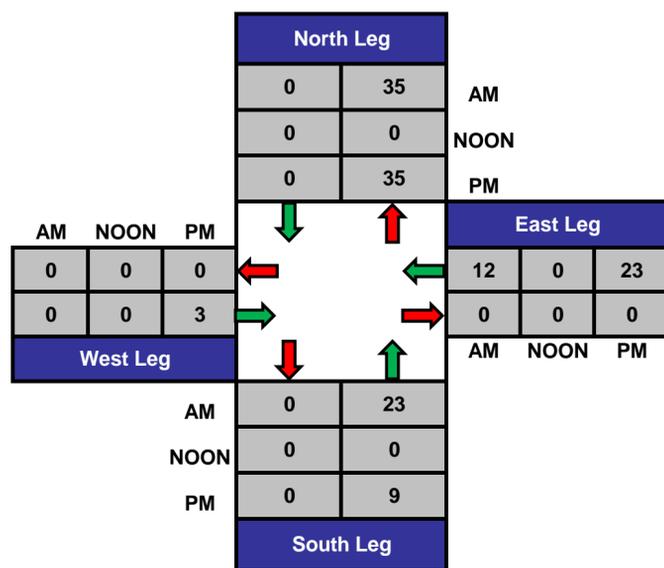
Day: Wednesday

Project #: 16-5054-102

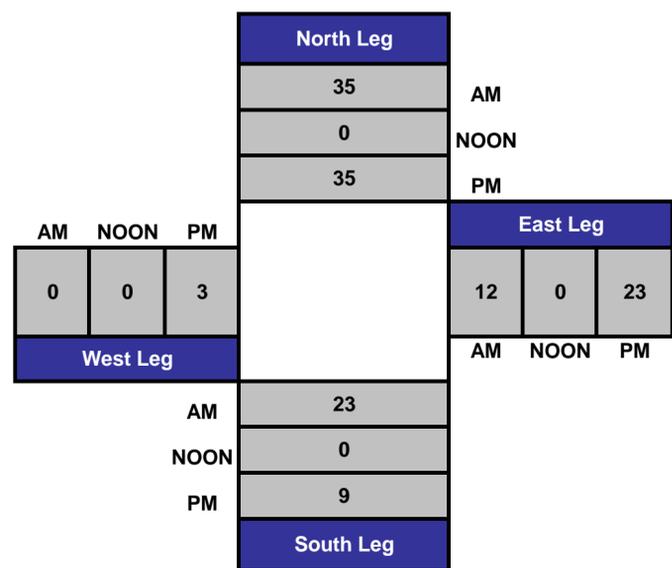
City: Beverly Hills



### Total Ins & Outs



### Total Volume Per Leg



# VOLUME

Charleville Blvd Bet. S Santa Monica Blvd & Durant Dr

Day: Wednesday  
Date: 2/3/2016

City: Beverly Hills  
Project #: CA16\_5055\_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					1,803	2,433	0	0	4,236		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	2	1			3	12:00	40	32			72
00:15	0	4			4	12:15	28	33			61
00:30	2	5			7	12:30	29	29			58
00:45	1	5	7	17	8	12:45	34	131	31	125	256
01:00	0	4			4	13:00	33	43			76
01:15	2	1			3	13:15	33	42			75
01:30	1	1			2	13:30	33	31			64
01:45	0	3	2	8	2	13:45	25	124	39	155	279
02:00	0	1			1	14:00	33	40			73
02:15	1	1			2	14:15	37	34			71
02:30	0	0			0	14:30	42	36			78
02:45	0	1	0	2	0	14:45	48	160	64	174	334
03:00	0	0			0	15:00	47	64			111
03:15	0	0			0	15:15	33	72			105
03:30	0	0			0	15:30	39	54			93
03:45	0	2	2		2	15:45	30	149	55	245	394
04:00	0	0			0	16:00	46	43			89
04:15	0	0			0	16:15	36	43			79
04:30	1	1			2	16:30	24	52			76
04:45	1	2	2	3	3	16:45	35	141	50	188	329
05:00	2	0			2	17:00	27	64			91
05:15	1	1			2	17:15	31	48			79
05:30	4	1			5	17:30	23	59			82
05:45	6	13	4	6	10	17:45	42	123	58	229	352
06:00	3	4			7	18:00	32	39			71
06:15	6	7			13	18:15	31	57			88
06:30	5	15			20	18:30	22	51			73
06:45	10	24	54	80	64	18:45	18	103	47	194	297
07:00	18	22			40	19:00	25	52			77
07:15	19	24			43	19:15	22	49			71
07:30	21	46			67	19:30	18	30			48
07:45	36	94	77	169	113	19:45	17	82	31	162	244
08:00	33	36			69	20:00	17	27			44
08:15	33	19			52	20:15	11	17			28
08:30	38	20			58	20:30	12	18			30
08:45	52	156	32	107	84	20:45	10	50	11	73	123
09:00	37	36			73	21:00	10	16			26
09:15	40	37			77	21:15	9	14			23
09:30	28	28			56	21:30	11	9			20
09:45	33	138	33	134	66	21:45	4	34	8	47	81
10:00	33	42			75	22:00	4	6			10
10:15	29	44			73	22:15	11	8			19
10:30	28	24			52	22:30	9	6			15
10:45	29	119	34	144	63	22:45	3	27	7	27	54
11:00	28	24			52	23:00	4	8			12
11:15	33	36			69	23:15	1	5			6
11:30	23	39			62	23:30	1	2			3
11:45	33	117	27	126	60	23:45	1	7	1	16	23
<b>TOTALS</b>	672	798			1470	<b>TOTALS</b>	1131	1635			2766
<b>SPLIT %</b>	45.7%	54.3%			34.7%	<b>SPLIT %</b>	40.9%	59.1%			65.3%

DAILY TOTALS					NB	SB	EB	WB	Total
					1,803	2,433	0	0	4,236
AM Peak Hour	08:30	07:15			07:30	PM Peak Hour	14:15	14:45	14:45
AM Pk Volume	167	183			301	PM Pk Volume	174	254	421
Pk Hr Factor	0.803	0.594			0.666	Pk Hr Factor	0.906	0.882	0.940
7 - 9 Volume	250	276	0	0	526	4 - 6 Volume	264	417	681
7 - 9 Peak Hour	08:00	07:15			07:30	4 - 6 Peak Hour	16:00	17:00	17:00
7 - 9 Pk Volume	156	183	0	0	301	4 - 6 Pk Volume	141	229	352
Pk Hr Factor	0.750	0.594	0.000	0.000	0.666	Pk Hr Factor	0.766	0.895	0.880

# VOLUME

Durant Dr Bet. Moreno Dr & Charleville Blvd

Day: Wednesday  
Date: 2/3/2016

City: Beverly Hills  
Project #: CA16\_5055\_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	1,368	1,404	2,772		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			1	0	1	12:00			4	11	15
00:15			0	3	3	12:15			9	19	28
00:30			1	1	2	12:30			10	16	26
00:45			0	2	1	12:45			9	32	26
				1	5				17	63	95
01:00			0	0	0	13:00			24	24	48
01:15			0	0	0	13:15			26	25	51
01:30			0	0	0	13:30			14	20	34
01:45			1	1	2	13:45			13	77	33
				1	2				20	89	166
02:00			0	0	0	14:00			9	24	33
02:15			1	0	1	14:15			13	13	26
02:30			0	1	1	14:30			6	16	22
02:45			0	1	0	14:45			16	44	48
				1	2				32	85	129
03:00			0	0	0	15:00			41	38	79
03:15			0	0	0	15:15			15	28	43
03:30			0	0	0	15:30			18	17	35
03:45			0	1	1	15:45			16	90	35
				1	1				19	102	192
04:00			1	0	1	16:00			19	14	33
04:15			0	0	0	16:15			15	17	32
04:30			0	0	0	16:30			19	26	45
04:45			0	1	1	16:45			24	77	44
				1	2				20	77	154
05:00			0	0	0	17:00			40	21	61
05:15			0	1	1	17:15			48	16	64
05:30			0	0	0	17:30			60	21	81
05:45			1	1	3	17:45			97	245	115
				4	5				18	76	321
06:00			3	3	6	18:00			71	9	80
06:15			0	3	3	18:15			109	15	124
06:30			4	16	20	18:30			83	3	86
06:45			29	36	73	18:45			72	335	86
				95	102				14	41	376
07:00			9	18	27	19:00			42	11	53
07:15			7	19	26	19:15			25	14	39
07:30			16	76	92	19:30			18	11	29
07:45			62	94	123	19:45			11	96	26
				236	185				15	51	147
08:00			26	25	51	20:00			9	12	21
08:15			4	23	27	20:15			5	10	15
08:30			8	31	39	20:30			4	5	9
08:45			3	41	59	20:45			10	28	15
				138	62				5	32	60
09:00			19	42	61	21:00			3	4	7
09:15			12	34	46	21:15			5	5	10
09:30			3	23	26	21:30			4	8	12
09:45			10	44	25	21:45			3	15	8
				124	35				5	22	37
10:00			11	21	32	22:00			4	5	9
10:15			11	14	25	22:15			3	4	7
10:30			9	20	29	22:30			1	2	3
10:45			10	41	18	22:45			3	11	7
				73	28				4	15	26
11:00			17	18	35	23:00			0	3	3
11:15			8	16	24	23:15			1	3	4
11:30			13	15	28	23:30			2	0	2
11:45			14	52	12	23:45			1	4	6
				61	26				5	11	15
<b>TOTALS</b>			314	740	1054	<b>TOTALS</b>			1054	664	1718
<b>SPLIT %</b>			29.8%	70.2%	38.0%	<b>SPLIT %</b>			61.4%	38.6%	62.0%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	1,368	1,404	2,772

AM Peak Hour	07:15	07:30	07:30	PM Peak Hour	17:45	14:45	17:45				
AM Pk Volume	111	247	355	PM Pk Volume	360	115	405				
Pk Hr Factor	0.448	0.502	0.480	Pk Hr Factor	0.826	0.757	0.817				
7 - 9 Volume	0	0	135	374	509	4 - 6 Volume	0	0	322	153	475
7 - 9 Peak Hour	07:15	07:30	07:30	4 - 6 Peak Hour	17:00	16:15	17:00				
7 - 9 Pk Volume	0	0	111	247	355	4 - 6 Pk Volume	0	0	245	84	321
Pk Hr Factor	0.000	0.000	0.448	0.502	0.480	Pk Hr Factor	0.000	0.000	0.631	0.808	0.698