

**FINAL  
VETERANS MEMORIAL PARKWAY AND  
SANTA BARBARA BOULEVARD  
OVERPASS STUDY**

**Lee County, Florida**

**Lee County Project Number:**

Prepared for:



**Lee County Department of Transportation  
1500 Monroe Street  
Fort Myers, Florida 33901**

**August 2010  
(Revised January 2012)**

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Prepared by:



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# *Section 1.0*

## *INTRODUCTION*

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The Lee County Department of Transportation (DOT) commissioned a study to evaluate the operation of an overpass along Veterans Memorial Parkway at the Santa Barbara Boulevard intersection. The intersection of Veterans Memorial Parkway and Santa Barbara Boulevard intersection under existing (2010) conditions is a signalized intersection with Veterans Memorial Parkway serving east/west travel needs and Santa Barbara Boulevard serving north/south travel needs.

### *1.1 PURPOSE*

The purpose of this study is to evaluate existing conditions (2010) and recommend future roadway improvements in conjunction with the proposed overpass along Veterans Memorial Parkway. As part of this effort, one No-Build and one Build Alternative which included non-toll and toll scenarios were analyzed for future opening year (2015) and design year (2035) conditions for AM and PM peak hours to identify the preferred Build Alternative. Both the opening year (2015) and design year (2035) analyses considered improvements along Veterans Memorial Parkway, as well as intersection improvements at Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard.

### *1.2 PROJECT DESCRIPTION*

The intersection of Veterans Memorial Parkway and Santa Barbara Boulevard is signalized and is located in the City of Cape Coral, Florida. This project evaluates the operation of an overpass along Veterans Memorial Parkway at the Santa Barbara Boulevard intersection by analyzing existing and future year traffic conditions for opening (2015) and design (2035) years. The *Lee-Collier County 2030 Long Range Transportation Plan*<sup>1</sup> referred as *2030 Lee Plan* hereafter, proposes an overpass improvement at the intersection of Veterans Memorial Parkway and Santa Barbara Boulevard. The Plan also proposes overpasses along Veterans Memorial Parkway at Skyline Boulevard and Country Club Boulevard intersections, which are adjacent major intersections to the west and east of the study intersection. The intersections and segments identified for this overpass study are shown in **Figure 1-1**.



**Project Location Map**

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**LEE COUNTY**  
SOUTHWEST FLORIDA

*Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
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Figure 1-1*



### **1.3 STUDY METHODOLOGY**

This traffic report presents the analyses of existing and future conditions for the roadways and intersections included in the defined transportation study area. The study area includes the following segments and intersections:

Segments:

- Veterans Memorial Parkway from Skyline Boulevard to Santa Barbara Boulevard
- Veterans Memorial Parkway from Santa Barbara Boulevard to Country Club Boulevard
- Santa Barbara Boulevard from SW 28th Street to Veterans Memorial Parkway
- Santa Barbara Boulevard from Veterans Memorial Parkway to SW 24th Street

Intersections:

- Veterans Memorial Parkway/Skyline Boulevard
- Veterans Memorial Parkway/Santa Barbara Boulevard
- Veterans Memorial Parkway/Country Club Boulevard

Existing (2010) conditions and future proposed conditions for the opening year (2015) and design year (2035) were analyzed for AM and PM peak conditions. The following future alternatives were analyzed for both opening and design years:

- No-Build Alternative
- Build Alternative
  - No-Toll Overpass at Veterans Memorial Parkway and Santa Barbara Boulevard
  - Tolloed Overpass at Veterans Memorial Parkway and Santa Barbara Boulevard

For all future Build Alternatives, it is assumed that there are overpasses along Veterans Memorial Parkway at the intersections of Skyline Boulevard and Country Club Boulevard, as all these overpasses were identified as cost feasible projects in the *2030 Lee Plan*.

Existing traffic conditions were analyzed using existing traffic characteristics, roadway characteristics and traffic counts for all of the identified study segments and intersections. Future traffic volumes were developed using projections from the Lee-Collier County 2030 Cost Feasible Model output. Simple annual growth rate was used to extrapolate and obtain 2035 design year traffic volumes. The future traffic conditions were analyzed for No-Build and Build Alternatives. The Build Alternatives include two scenarios, specifically with no-toll and with toll for the proposed overpass at Veterans Memorial Parkway and Santa Barbara Boulevard intersection.

# *Section 2.0*

## ***EXISTING CONDITIONS***

---

This section summarizes the type of data and resources used, and evaluation existing traffic conditions for the Veterans Memorial Parkway and Santa Barbara Boulevard intersection. The data collected was used to describe the physical roadway and traffic characteristics of the study area roadways and intersections.

### ***2.1 EXISTING TRAFFIC VOLUME DATA***

#### ***2.1.1 TRAFIC COUNT DATA***

Traffic count data was provided by Lee County Department of Transportation (DOT) for this study. The following summarizes types and corresponding dates for the counts used:

Turning movement counts (TMCs) were obtained/collected for the following intersections on the corresponding dates:

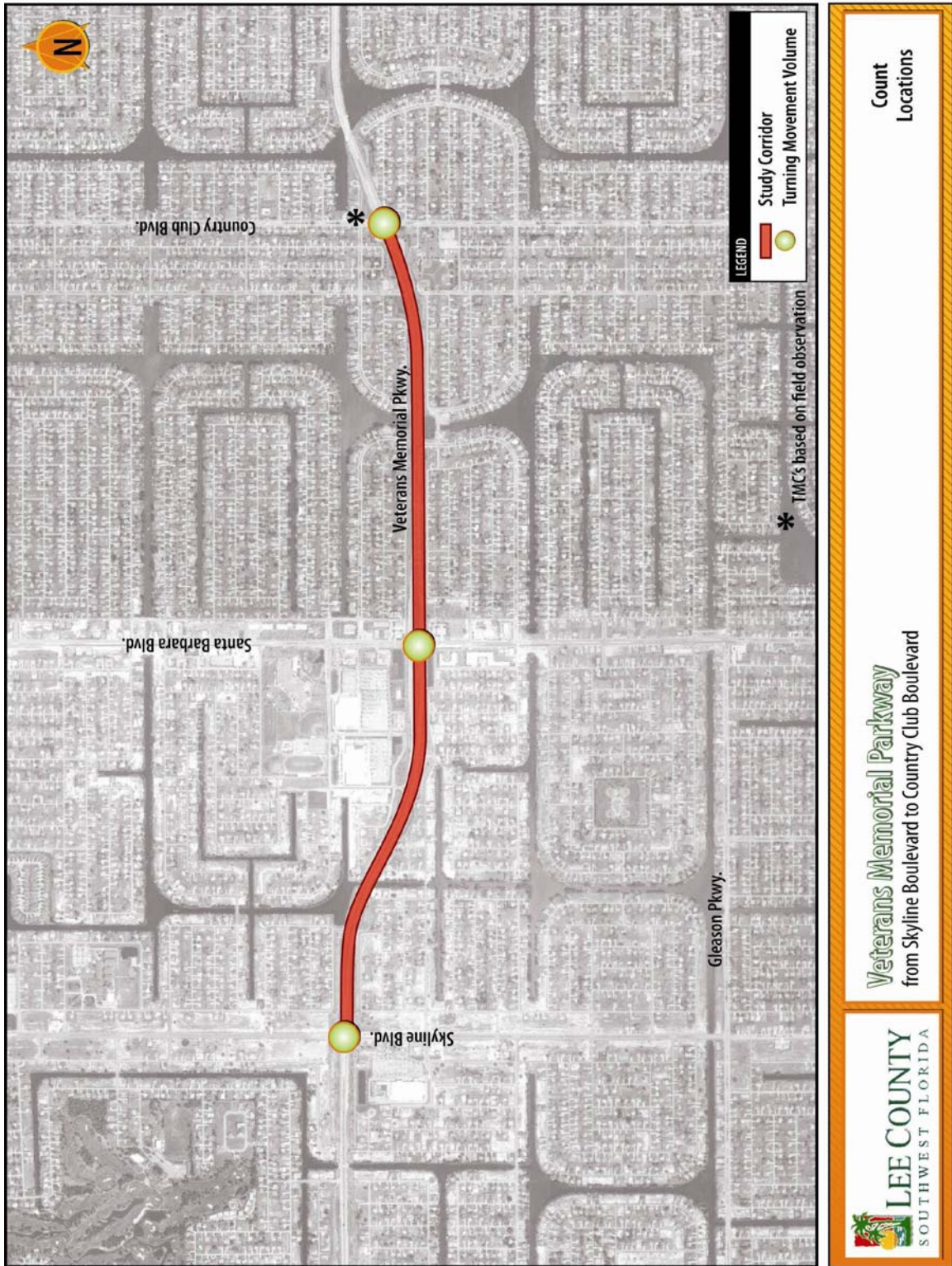
- Veterans Memorial Parkway/Skyline Boulevard (October 18, 2007)
- Veterans Memorial Parkway/Santa Barbara Boulevard (February 04, 2009)
- Veterans Memorial Parkway/Country Club Boulevard (June 15, 2010)

Twenty-four-Hour TMCs were obtained from Lee County DOT for Veterans Memorial Parkway at Skyline Boulevard and Santa Barbara Boulevard intersections. PM peak hour TMCs were collected for the intersection of Veterans Memorial Parkway and Country Club Boulevard during field observation. The traffic count locations are highlighted in **Figure 2-1**. Appendix A presents the raw TMCs data.

#### ***2.1.2 ANNUAL AVERAGE DAILY TRAFFIC VOLUMES***

The 2009 annual average daily traffic (AADT) volumes for the study area roadways were obtained from the *2009 Florida Traffic Information (FTI) DVD*<sup>2</sup> and the *2009 Traffic Count Report*<sup>3</sup> at the following locations:

- Veterans Memorial Parkway west of Skyline Boulevard  
(*2009 Traffic Count Report*)
- Veterans Memorial Parkway east of Skyline Boulevard (*2009 FTI DVD*)
- Veterans Memorial Parkway east of Santa Barbara Boulevard (*2009 FTI DVD*)
- Veterans Memorial Parkway east of Country Club Boulevard (*2009 FTI DVD*)
- Santa Barbara Boulevard south of Veterans Memorial Parkway (*2009 FTI DVD*)
- Santa Barbara Boulevard north of Veterans Memorial Parkway (*2009 FTI DVD*)
- Country Club Boulevard south of Veterans Memorial Parkway (*2009 FTI DVD*)



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 2-1

### **2.1.3 PEAK HOUR VOLUMES**

The existing (2010) peak hour turning movement volumes for the study intersections were developed from the raw TMCs. The turning movements were broken down into 15-minute intervals and each group of consecutive 15-minute intervals was summed up to determine the peak hour for each intersection. The TMCs obtained at each intersection were balanced with no yearly growth, even though the TMCs taken at each intersection are from different years. This was done because of the current downward trend in yearly traffic volumes and the necessity to use raw traffic volumes for existing conditions analysis in traffic analysis software. The detailed calculations used in determining the peak hour volumes are provided in Appendix C. The resulting existing (2010) AM and PM peak hour volumes are shown in **Figure 2-2**.

### **2.1.4 EXISTING TRAFFIC CHARACTERISTICS**

Given that vehicle classification counts were not collected as part of this study, the *2009 FTI DVD* was used to obtain truck information for the study area roadways. This information is presented in Appendix D. As standard practice, design hour truck (DHT) percentages are assumed to be one-half of  $T_{24}$ . A DHT percentage of 2 percent is used for Veterans Memorial Parkway and Santa Barbara Boulevard and a DHT percentage of 1 percent is used for Skyline Boulevard and Country Club Boulevard.

### **2.1.5 EXISTING ROADWAY CHARACTERISTICS**

*The Lee Plan 2009 Codification*<sup>4</sup> (As amended through May 2009) was reviewed to determine the minimum level of service (LOS) standard for the study area roadways. Based on this document, the minimum standard is LOS E for Veterans Memorial Parkway, Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard.

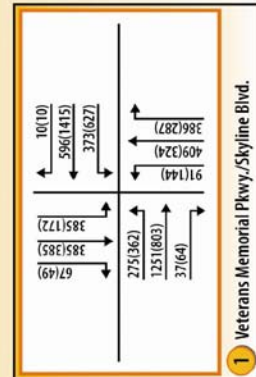
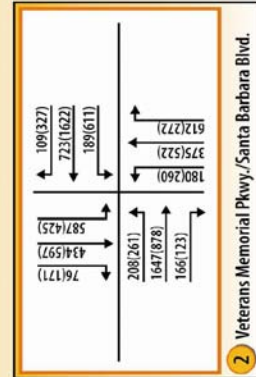
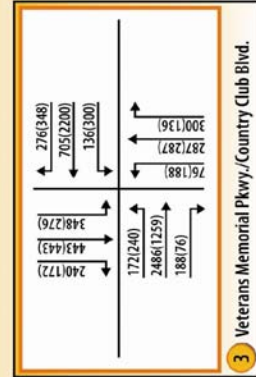
Three existing signalized intersections are being evaluated as part of this study. The intersections are as follows:

- Veterans Memorial Parkway/Skyline Boulevard
- Veterans Memorial Parkway/Santa Barbara Boulevard
- Veterans Memorial Parkway/Country Club Boulevard

The existing lane geometry for the study area intersections was obtained during a field review. The existing lane configurations for the intersections listed above are displayed in **Figure 2-3**. Signal operating plans for all of the intersections in the study area were obtained from Lee County DOT. Signal operating plans are provided in Appendix D.

## **2.2 EXISTING OPERATIONAL ANALYSES**

The existing operational analyses included evaluation of all intersections and corresponding roadway segments in the study area. The analyses were conducted using the *Traffic Software Integrated System (Version 6.1) CORSIM*<sup>5</sup> traffic micro-simulation analysis tool.

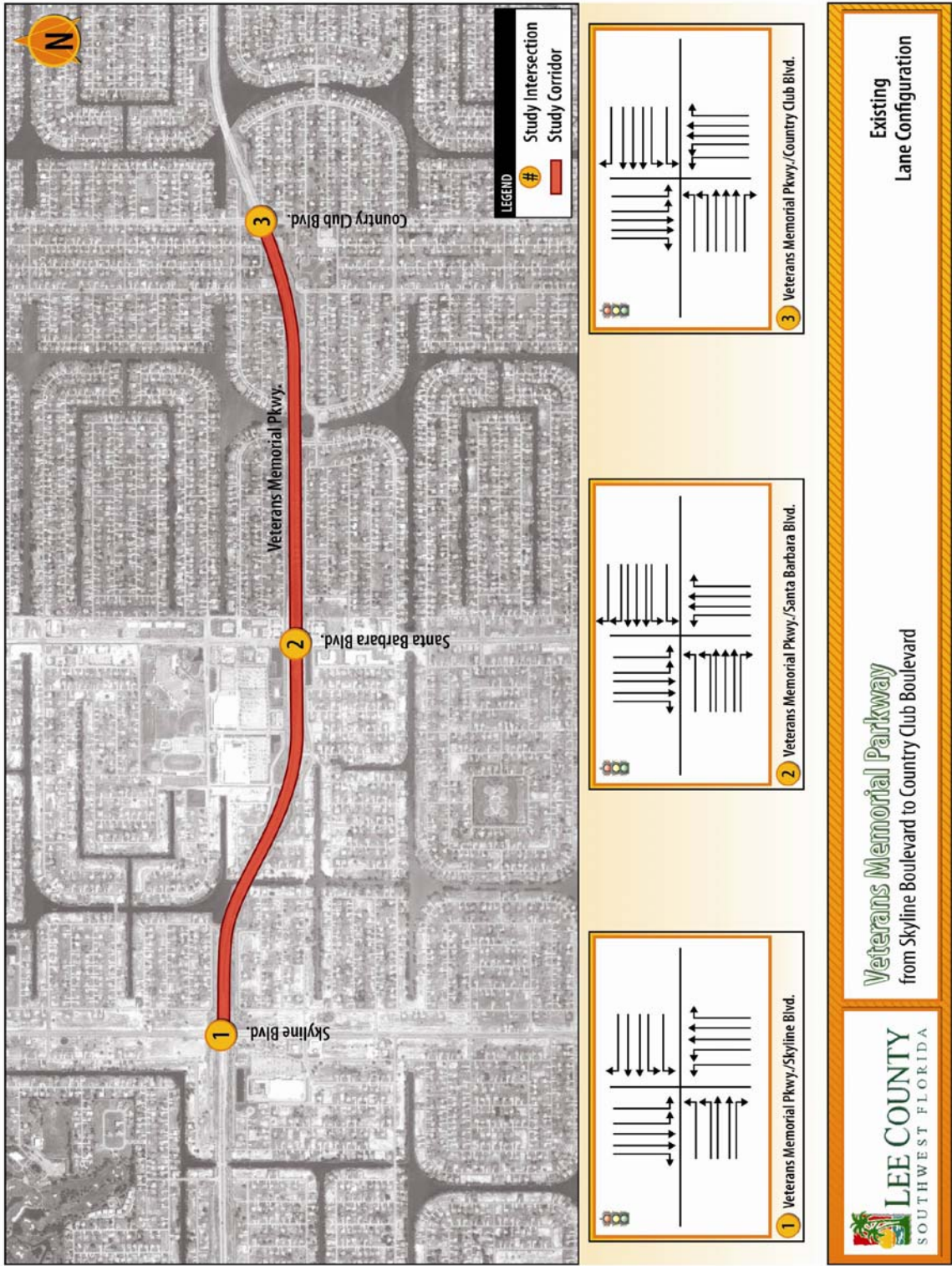


**Existing Peak Hour Volumes**

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**LEE COUNTY**  
SOUTHWEST FLORIDA

Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 2-2



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 2-3

The following input data was used to complete the analyses for the AM and PM peak hour existing intersection and roadway segment analyses:

- Existing AM and PM peak hour turning movement volumes displayed in Figure 2-3
- Existing intersection geometries displayed in Figure 2-4
- Existing DHT percentages provided in Appendix D
- Existing signal phasing and timing plans, from the Lee County DOT, provided in Appendix D.

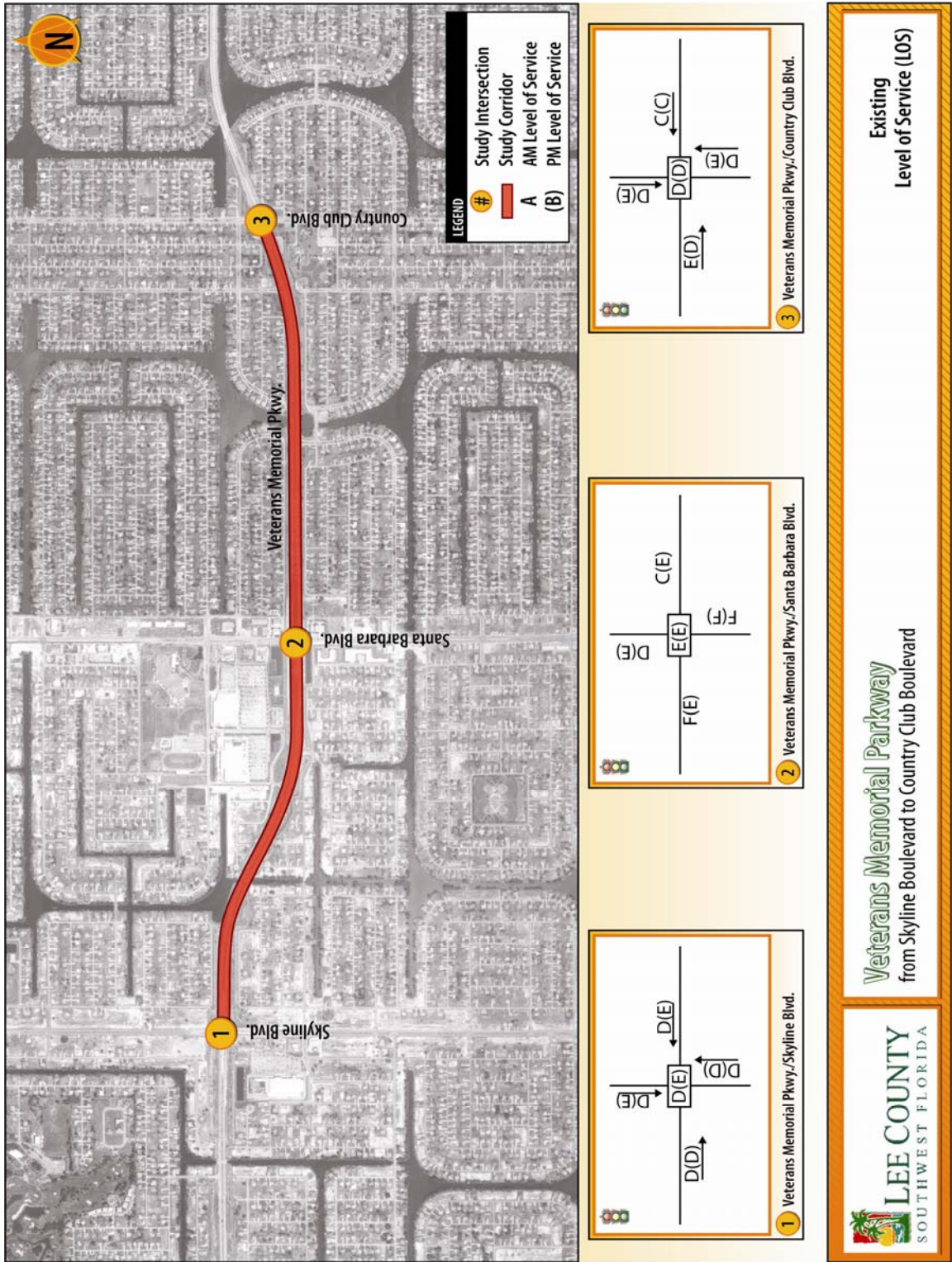
A *CORSIM* network, simulating the existing conditions, was coded using the data listed above and calibrated based on factors such as speed, queue lengths and volumes. The calibration effort is described in detail in the following section.

### **2.2.1      *CORSIM NETWORK CALIBRATION***

This section describes the procedure followed in calibrating the *CORSIM* model networks for the Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study. The *CORSIM* model network was calibrated such that the model would yield traffic simulation results comparable to existing conditions. A travel time survey, conducted during existing PM peak hour conditions, along Veterans Memorial Parkway corridor was used for calibrating PM peak hour conditions. The travel time survey was done using the “floating car method,” whereby a vehicle proceeds with the traffic along the corridor. The method was used four times in each direction (eastbound and westbound) along the entire study corridor. This information was then used to calculate travel time and average speed. In addition, select locations served as benchmarks where travel times along the corridor were identified. A field review was conducted to determine queue length statistics at turn lanes throughout the study area. The results from the field observations are provided in Appendix D.

Adjustments were made to the model network as necessary, in order to replicate the results from the travel time survey and field observations. The turning movement volumes and average speeds reported by the model network were compared to the peak hour traffic counts and average speed calculated from the travel time study at respective locations. The queue lengths generated by the model network were compared to the observed queue lengths obtained from a field review. Factors were adjusted, as necessary, and the model was rerun until the model reported comparable results to those observed in the field. The calibration factors developed for the PM peak hour network were assumed for the AM peak hour *CORSIM* network.

The resultant calibrated networks were then simulated ten times with randomly generated seed numbers and averaged. The link node diagram for the existing model networks are provided in Appendix E. The existing *CORSIM* reports for the signalized intersection analyses, roadway segment analyses, as well as the accompanying *Highway Capacity Manual*<sup>6</sup> equivalency tables are provided in Appendix E (Existing Operational Analyses). The LOS results from the intersection and roadway operational analyses are illustrated in **Figure 2-4**. **Table 2-1** summarizes the existing intersection analysis.



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 2-4



**Table 2-1  
Existing Intersection LOS Summary**

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	48.0	D	48.2	D
	Westbound	40.1	D	57.7	E
	Northbound	40.7	D	50.3	D
	Southbound	54.6	D	66.2	E
	<b>Overall Intersection</b>	<b>46.0</b>	<b>D</b>	<b>55.1</b>	<b>E</b>
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	98.2	F	64.8	E
	Westbound	35.1	C	65.0	E
	Northbound	81.6	F	83.6	F
	Southbound	47.6	D	66.4	E
	<b>Overall Intersection</b>	<b>71.9</b>	<b>E</b>	<b>68.5</b>	<b>E</b>
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	60.6	E	37.8	D
	Westbound	28.3	C	33.2	C
	Northbound	41.8	D	62.7	E
	Southbound	44.2	D	69.5	E
	<b>Overall Intersection</b>	<b>48.9</b>	<b>D</b>	<b>42.9</b>	<b>D</b>

### **2.3 AVERAGE OVERALL EXISTING NETWORK PERFORMANCE**

This section summarizes the average overall network performance parameters under existing conditions from the ten *CORSIM* simulation outputs. The overall demand volume (Veh) is the total sum of peak hour turning movement volumes at all the intersections along the Veterans Memorial Parkway corridor. The overall processed volume (Veh) is the sum of peak hour turning movement volumes at all the intersections and overpass sections along Veterans Memorial Parkway corridor generated by *CORSIM* after peak hour simulation. **Table 2-2** shows the overall network demand volumes and the overall network processed volumes.

It is evident from Table 2-2 that the demand volume applied to the network is almost completely processed during each simulation of the peak hour. This also indicates that the *CORSIM* network was appropriately calibrated and validated. *CORSIM* also provides summary of several other overall network parameters like total vehicle-miles (Veh-Mile), duration of travel (Veh-Hr), average speed (miles per hour [mph]), and travel time (Min/Mile). **Table 2-3** shows average overall network parameters resulting from simulation of existing conditions. The definitions for the overall parameters are given below. The overall existing network performance parameters for all the ten simulations is provided in Appendix E.

**Table 2-2  
Overall Network Demand and Processed Volumes**

Alternative	Peak	Overall Network Demand Volumes	Average Overall Network Processed Volumes	Percent Vehicles	
				Processed	Not Processed
Existing	AM	8,361	8,336	99.71%	0.29%
	PM	9,187	9,161	99.72%	0.28%

**Table 2-3  
Existing Average Network Parameters**

Alternative	Peak Hour	Total Vehicle-Miles	Duration (Vehicle - Hours)				Speed (Mph)	Time (Min/Mile)	
			Move	Delay	Total	Move/Total		Delay	Total
Existing	AM	15,123	319	285	604	0.53	25	1.13	2.39
	PM	16,910	356	315	671	0.53	25	1.12	2.38

**DEFINITIONS:**

Total Time – Link length divide by the average speed (in feet/second) of all vehicles on the link since the beginning of the simulation.

Vehicle Minutes – Total time on the link for all vehicles on the link since the beginning of the simulation.

Total Vehicle Miles – Total distance traveled by all vehicles on links since the beginning of the simulation.

Move Time – Total Time per vehicle multiplied by the Ratio of Move Time to Total Time.

Delay Time – Total Time per vehicle minus Move Time per vehicle.

Ratio of Move Time to Total Time – Total Vehicle Minutes minus the total accumulated number of vehicle delay (in seconds), divided by Total Vehicle Minutes. Delay is the difference between the time it would take a vehicle to travel the length of the link if it traveled at the link free-flow speed and the actual time that it takes the vehicle to travel that distance.

# *Section 3.0*

## *FUTURE CONDITIONS*

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### *3.1 FUTURE TRAFFIC CONDITIONS*

This section summarizes the analysis of future traffic conditions for the Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study. The analysis required the development of future traffic characteristics and projections for the roadways within the study area. As part of the analysis of future conditions, No-Build and Build Alternatives were analyzed. All future alternatives were analyzed and evaluated under both opening year (2015) and design year (2035) traffic conditions. The opening year (2015) and design year (2035) analysis for the Build Alternatives considered overpasses along Veterans Memorial Parkway at the intersections of Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard.

### *3.2 FUTURE ALTERNATIVES*

#### *3.2.1 NO-BUILD ALTERNATIVE*

The No-Build Alternative considers the existing roadway conditions without any additional improvements. The opening year (2015) and design year (2035) traffic analyses were performed under a No-Build condition, which assumes that there are no future roadway improvements in the study area.

#### *3.2.2 BUILD ALTERNATIVES*

Future traffic analyses for Build Alternatives assume overpasses along Veterans Memorial Parkway at the intersections of Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard as proposed in the Lee-Collier County 2030 Cost Feasible Model. The overpasses at Skyline Boulevard and Country Club Boulevard provide adequate capacity, thereby accommodating the projected traffic demand and avoiding bottleneck conditions on either side of Veterans Parkway/Santa Barbara Boulevard.

The analysis of future Build Alternatives was performed for the following alternatives for the overpass.

- Alternative 1 – Build Alternative with No-Toll
- Alternative 2 – Build Alternative with Toll

Apart from the Build Alternatives, it was initially proposed to analyze another toll scenario which considered an increase in toll at the existing toll collection facility along Veterans Memorial Parkway just west of Mid-Point Bridge. Under this toll alternative, no additional toll will be collected for accessing the proposed overpass at Santa Barbara Boulevard; therefore, the percent of through traffic using the overpass along Veterans

Memorial Parkway will be the same as the Alternative 1 - Build Alternative with No-Toll Scenario. The overall traffic demand, however, will be lower due to the increased toll for this Alternative when compared to Alternative 1. Therefore, this toll scenario involving additional toll at the existing toll facility along Veterans Memorial Parkway (Mid-Point Bridge) was not included as part of the future traffic analysis.

### 3.3 TRAFFIC PROJECTIONS

Development of future traffic volumes was based on demand volumes projected by the Lee-Collier County 2030 Cost Feasible Model. Since the model provided only 2030 traffic demand volumes, a simple annual growth rate was used to extrapolate 2030 model output volumes and develop design year (2035) traffic volumes.

Simple average growth rate was determined using the 2009 annual average daily traffic (AADT) volumes obtained from the *2009 FTI DVD* and the Lee-Collier County 2030 Cost Feasible Model along Veterans Memorial Parkway and intersecting roadways within the study area. The average growth along Veterans Memorial Parkway is 2.0 percent and the average growth inclusive of intersecting roadways is 2.1 percent. A growth rate of 2.0 percent is used for this study. The traffic memorandum detailing the process of developing growth rates, as approved by Lee County Department of Transportation (DOT) is provided in Appendix F.

#### 3.3.1 FUTURE TRAFFIC ASSUMPTIONS

Peak hour traffic characteristics obtained from the *2009 FTI DVD* at the permanent count station location on Veterans Memorial Parkway west of Santa Barbara Boulevard were determined to be used for developing future design hour traffic projections. This permanent count station has a  $K_{30}$  of 9.79,  $D_{30}$  of 68.04 and  $T_{24}$  of 3.36. However, the observed  $D_{30}$  is greater than the  $D_{30}$  factor range recommended by the Florida Department of Transportation (FDOT) *Project Traffic Forecasting Handbook*.<sup>7</sup> Since, most of the adjacent count stations have a  $D_{30}$  factor of 57.25 percent; which is consistent with the  $D_{30}$  factor recommended by the FDOT *Project Traffic Forecasting Handbook* for an average urban arterial, a  $D_{30}$  of 57.25 was considered. The ' $K_{30}$ ', ' $D_{30}$ ' and ' $T_{24}$ ' used for developing future traffic volumes are presented in **Table 3-1**.

**Table 3-1**  
**Traffic Characteristics**

$K_{30}$	$D_{30}$	$T_{24}$
9.79	57.25	2.00

As noted in Section 2.0 – Existing Conditions, the design hour truck (DHT) percentage obtained from *the 2009 FTI DVD* was assumed to be one-half of  $T_{24}$ . A DHT of 2 percent

is used for Veterans Memorial Parkway and Santa Barbara Boulevard, and a DHT of 1 percent is used for Skyline Boulevard and country Club Boulevard.

### **3.3.2 PEAK HOUR TRAFFIC PROJECTIONS**

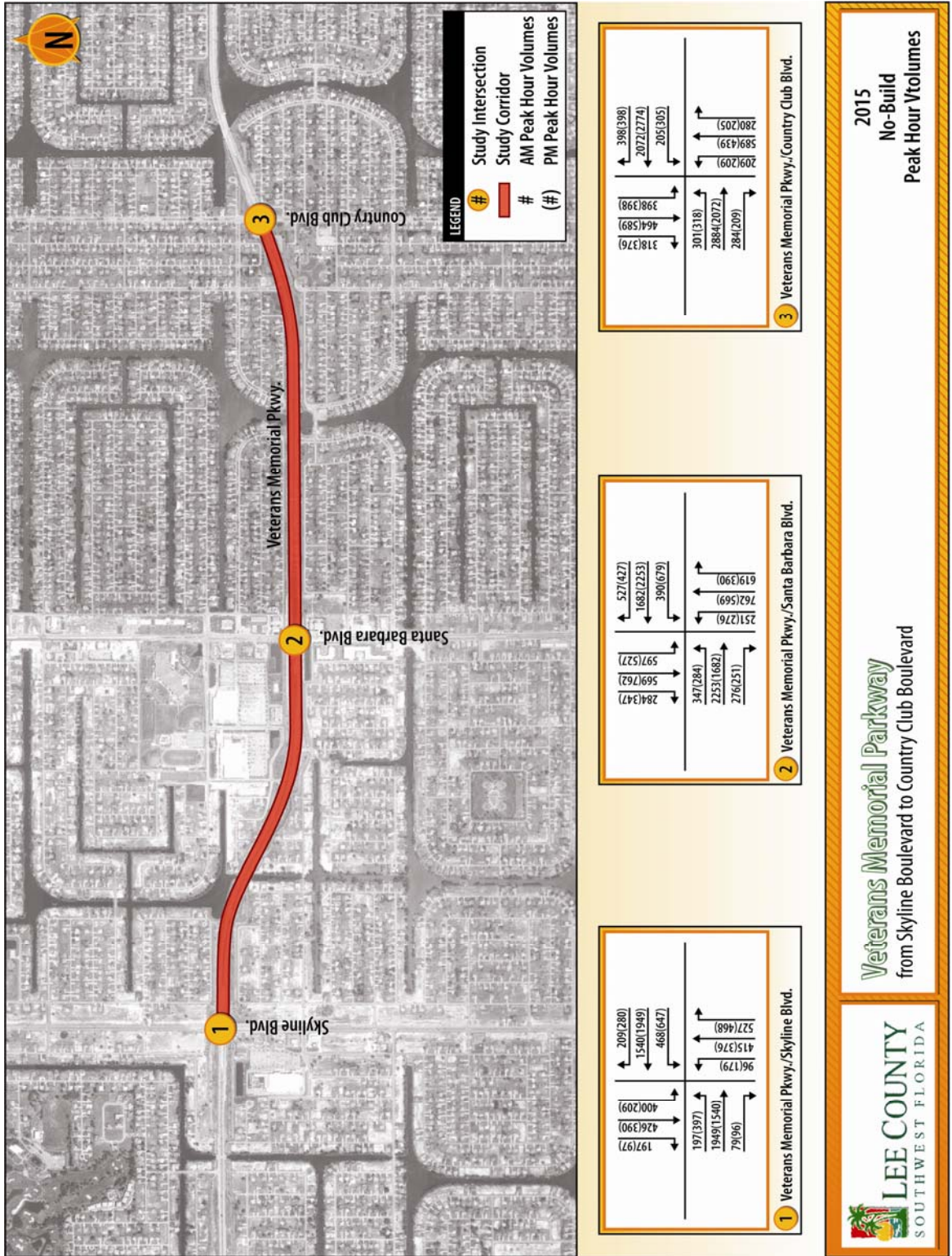
Using the 2009 AADT volumes obtained from the 2009 FTI DVD, 2030 AADT volumes obtained from Lee-Collier County 2030 Cost Feasible Model and the existing PM peak hour turning movement volumes along with the traffic factors discussed above, the 2015 and 2030 PM peak hour traffic volumes were developed using the *FDOT TURNS5A*<sup>8</sup> program. The 2030 peak hour volumes were then projected using a simple annual growth rate of 2.0 percent to obtain 2035 PM peak design hour traffic volumes. The AM peak design hour traffic volumes were then derived from PM peak hour traffic volumes by assuming that the peak travel direction is reversed. The resultant peak hour traffic volumes were balanced to make sure volumes entering/leaving the intersections are consistent with upstream and downstream intersections. Appendix G shows the design hour traffic volumes calculated using the *FDOT TURNS5A* program and the application of a 2.0 percent annual growth rate. **Figures 3-1** and **3-2** illustrate the balanced opening year (2015) and design year (2035) traffic volumes for AM and PM peak hours under No-Build conditions.

For Alternative 1 - Build Alternative with No-Toll condition, the opening year (2015) and design year (2035) AM and PM peak hour traffic volumes were derived by adjusting the No-Build traffic volumes with percent through traffic diversion projected by the Lee-Collier County 2030 Cost Feasible Model along Veterans Memorial Parkway at the proposed overpass location. Based on the model output, a diversion of 96 percent to 99 percent of the through traffic was assumed to be utilizing the proposed overpass at the Veterans Memorial Parkway and Santa Barbara Boulevard intersection. **Figures 3-3** and **3-4** illustrate the opening year (2015) and design year (2035) traffic volumes during AM and PM peak hours for Alternative 1.

For Alternative 2 - Build Alternative with Toll Condition, the opening year (2015) and design year (2035) peak hour traffic volumes were developed using No-Build volumes and toll diversions recommended by the toll feasibility analysis for this overpass. The No-Build opening year (2015) peak hour volumes were adjusted by shifting 60 percent of the through traffic to access the overpass at the Veterans Memorial Parkway and Santa Barbara Boulevard intersection. The design year (2035) AM and PM peak hour traffic volumes were developed using 2035 No-Build volumes by shifting 65 percent of the through traffic to access the overpass at the Veterans Memorial Parkway and Santa Barbara Boulevard intersection. **Figures 3-5** and **3-6** illustrate the opening year (2015) and design year (2035) traffic volumes during AM and PM peak hours for Alternative 2.

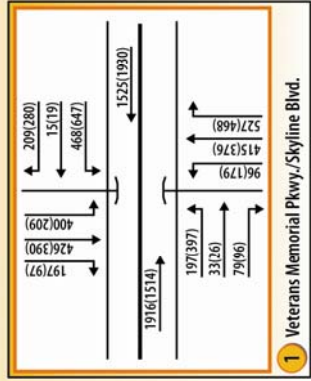
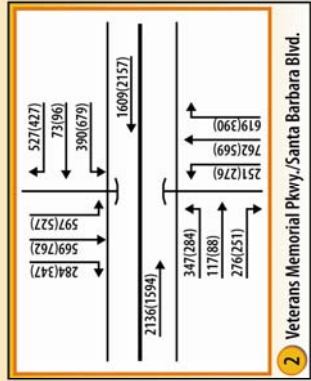
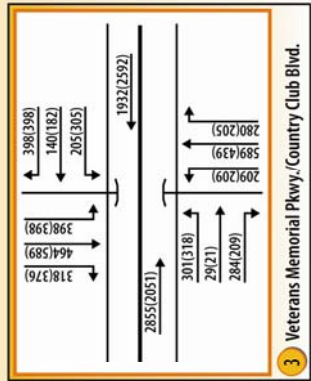
## **3.4 FUTURE OPERATIONAL ANALYSES**

The future operational analyses included an evaluation of all signalized intersections and corresponding roadway segments located in the study area for all alternatives. The analyses were conducted using the latest version of *CORSIM* for the intersection and segment analyses.



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
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Figure 3-1



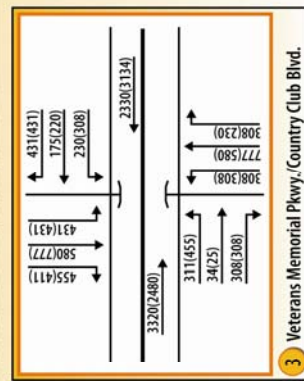
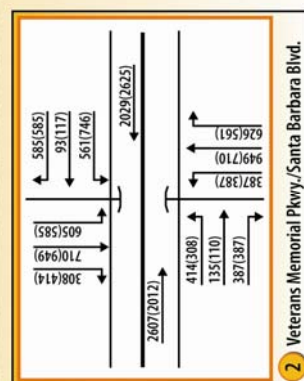
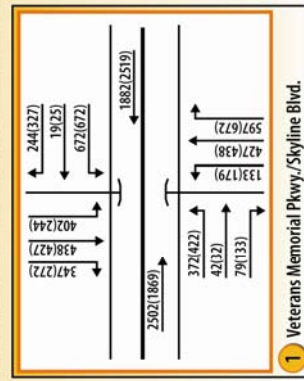


**2015 Alternative 1  
with No-Toll  
Peak Hour Volumes**

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

*Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-3*





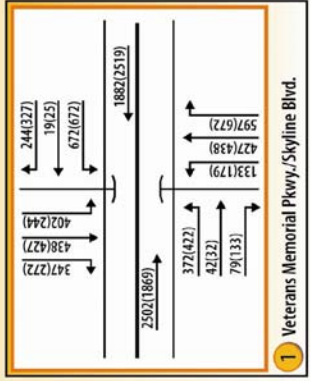
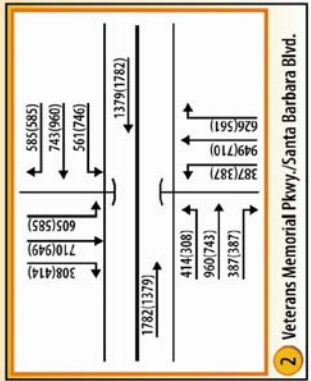
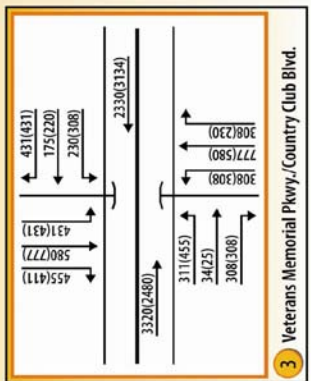


**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**2035 Alternative 1**  
with No-Toll  
Peak Hour Volumes

Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-4





**LEE COUNTY**  
SOUTHWEST FLORIDA

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**2035 Alternative 2**  
with Toll  
Peak Hour Volumes

Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-6

The following input data was used to complete the analyses for the AM and PM peak hour future intersection and roadway segment analyses:

- Future opening year (2015) and design year (2035) AM and PM peak hour turning movement volumes displayed in Figures 3-1 to 3-6
- Existing DHT, which are carried forward for the future year analyses
- Signal characteristics
- Overpass traffic diversions from the model

The following sections summarize the results of the future operational analysis of each alternative respectively.

### **3.4.1 NO-BUILD ALTERNATIVE**

The No-Build Alternative considers the existing roadway conditions without any additional improvements. The opening year (2015) and design year (2035) AM and PM peak hour *CORSIM* networks were developed by modifying the existing AM and PM peak hour *CORSIM* networks. The peak hour turning movement volumes shown in Figures 3-1 and 3-2 were used in *CORSIM* to develop future networks. The cycle lengths of the signalized intersections were assumed to be the same; however, the signal phase splits were optimized for each analysis hour. The resultant *CORSIM* network was simulated ten times with randomly generated seed numbers for one hour during AM and PM peak period. The results of the ten simulations were averaged. The level of service (LOS) for intersections was determined by comparing the average control delay information obtained from *CORSIM* simulation outputs to Table 16-2 of the *Highway Capacity Manual*. **Tables 3-2** and **3-3** summarize the results of opening year (2015) and design year (2035) operational analyses. **Figures 3-7** and **3-8** illustrate the opening year (2015) and design year (2035) LOS for AM and PM peak hour conditions. The results of the *CORSIM* intersection operational analyses are provided in Appendix H. For comparison purposes, the overall network performance parameters from the *CORSIM* simulation results are provided in Section 3.5.

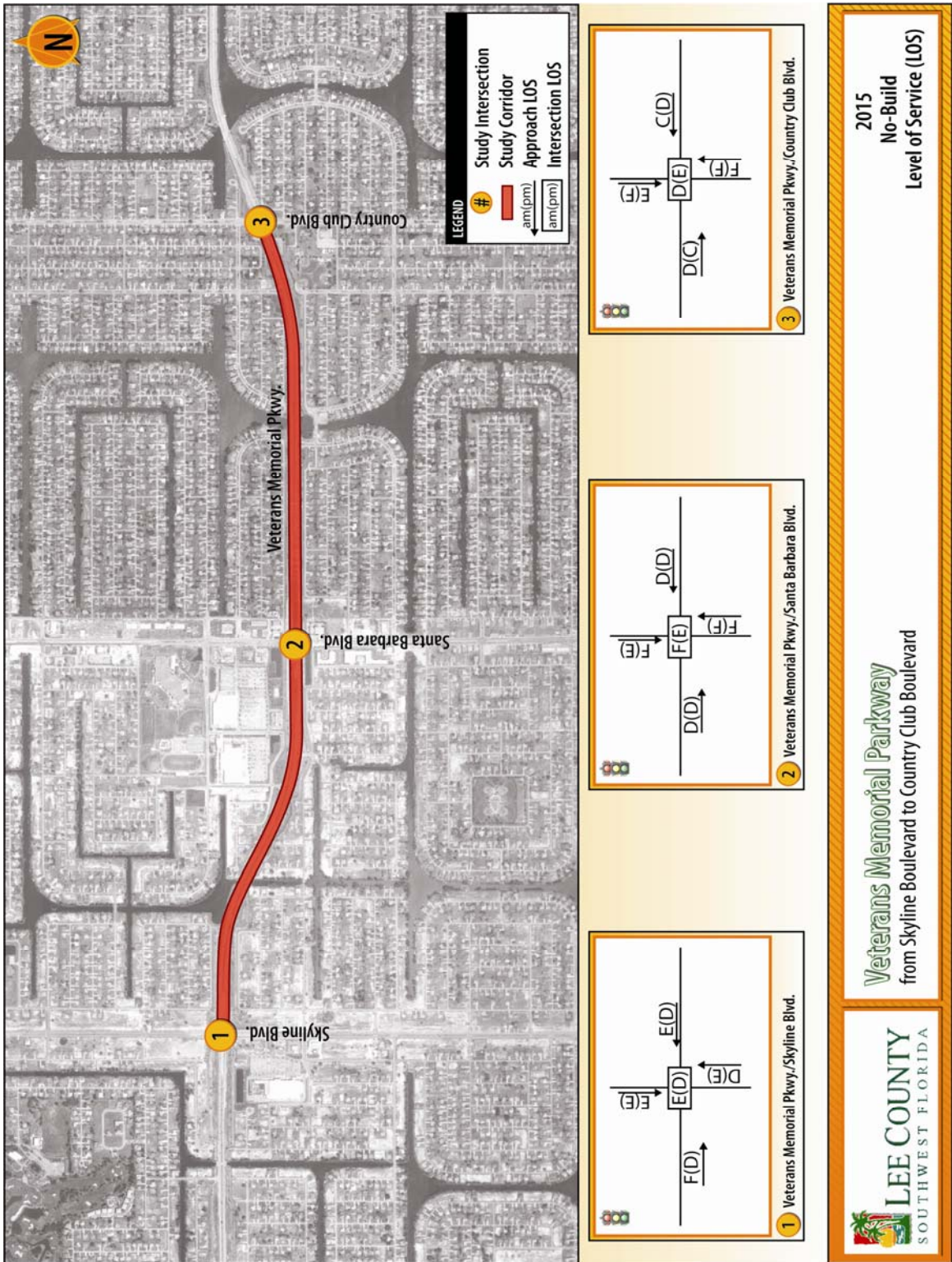
Based on results from the *CORSIM* simulation, the northbound and southbound Santa Barbara Boulevard approaches fail to perform at acceptable LOS standards during 2015 traffic conditions. Almost all approaches to intersections within the study area fail during 2035 No-Build conditions. It was also observed that the vehicles backup along Veterans Memorial Parkway extended beyond the coded network during 2035 No-Build conditions. The signals at Skyline Boulevard and Country Club Boulevard intersections acted as bottlenecks along Veterans Memorial Parkway.

**Table 3-2**  
**No-Build Alternative – Summary of 2015 Operational Analysis**

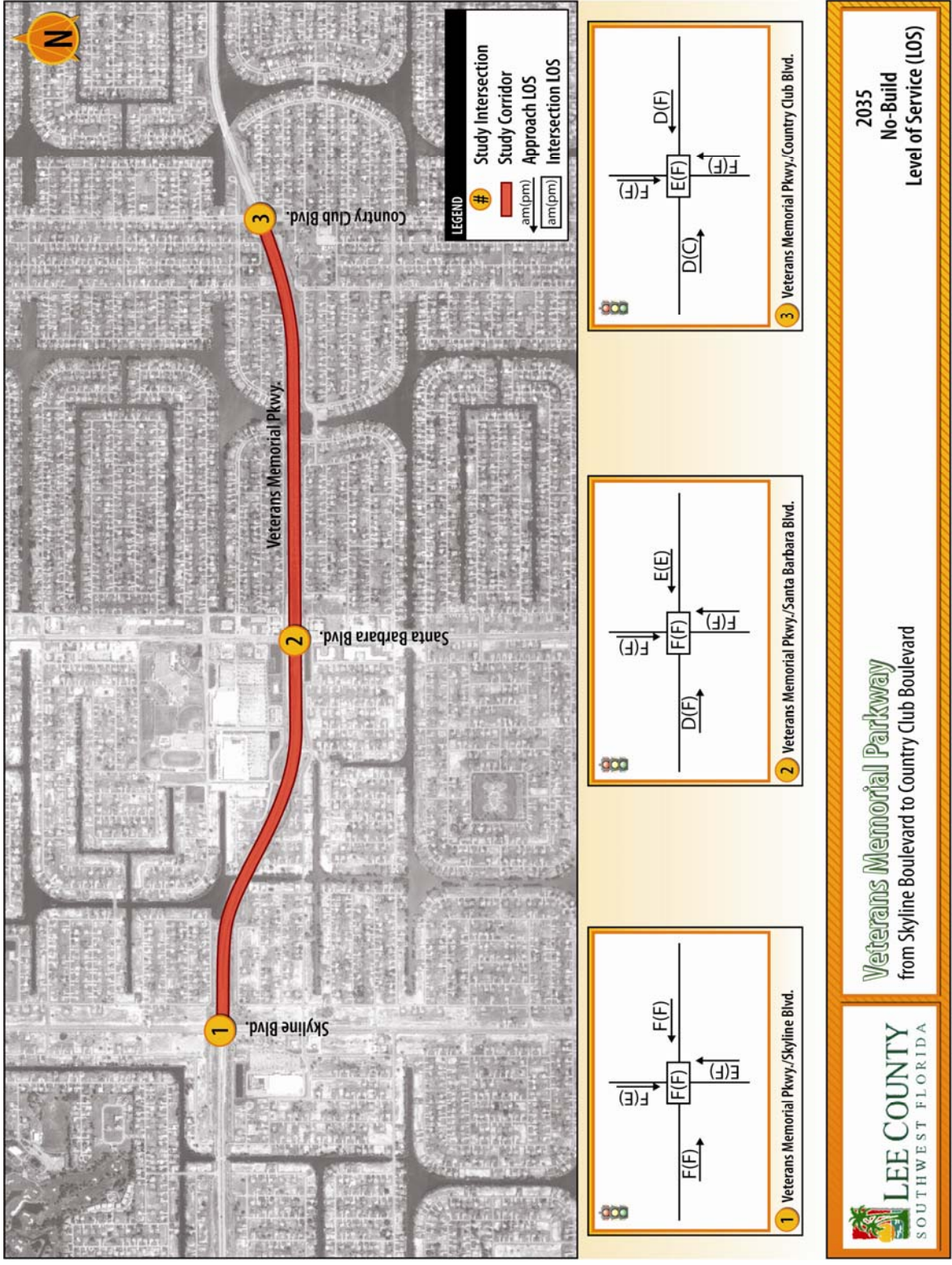
Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	124.3	F	48.2	D
	Westbound	58.0	E	44.8	D
	Northbound	46.9	D	59.1	E
	Southbound	64.7	E	71.2	E
	<b>Overall Intersection</b>	<b>78.6</b>	<b>E</b>	<b>50.8</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	48.8	D	45.8	D
	Westbound	40.1	D	42.9	D
	Northbound	219.5	F	97.0	F
	Southbound	156.9	F	76.9	E
	<b>Overall Intersection</b>	<b>91.4</b>	<b>F</b>	<b>58.1</b>	<b>E</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	38.8	D	30.7	C
	Westbound	32.9	C	35.5	D
	Northbound	112.4	F	114.9	F
	Southbound	57.6	E	195.7	F
	<b>Overall Intersection</b>	<b>49.4</b>	<b>D</b>	<b>67.7</b>	<b>E</b>

**Table 3-3**  
**No-Build Alternative – Summary of 2035 Operational Analysis**

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	118.8	F	115.0	F
	Westbound	145.8	F	144.9	F
	Northbound	60.4	E	198.6	F
	Southbound	92.7	F	63.4	E
	<b>Overall Intersection</b>	<b>113.5</b>	<b>F</b>	<b>133.1</b>	<b>F</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	45.5	D	159.0	F
	Westbound	59.0	E	61.1	E
	Northbound	266.3	F	211.8	F
	Southbound	267.6	F	420.6	F
	<b>Overall Intersection</b>	<b>117.4</b>	<b>F</b>	<b>167.7</b>	<b>F</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	40.1	D	33.3	C
	Westbound	37.2	D	98.6	F
	Northbound	283.0	F	350.7	F
	Southbound	85.1	F	288.0	F
	<b>Overall Intersection</b>	<b>79.4</b>	<b>E</b>	<b>135.0</b>	<b>F</b>



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-7



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
 Final Report  
 Figure 3-8

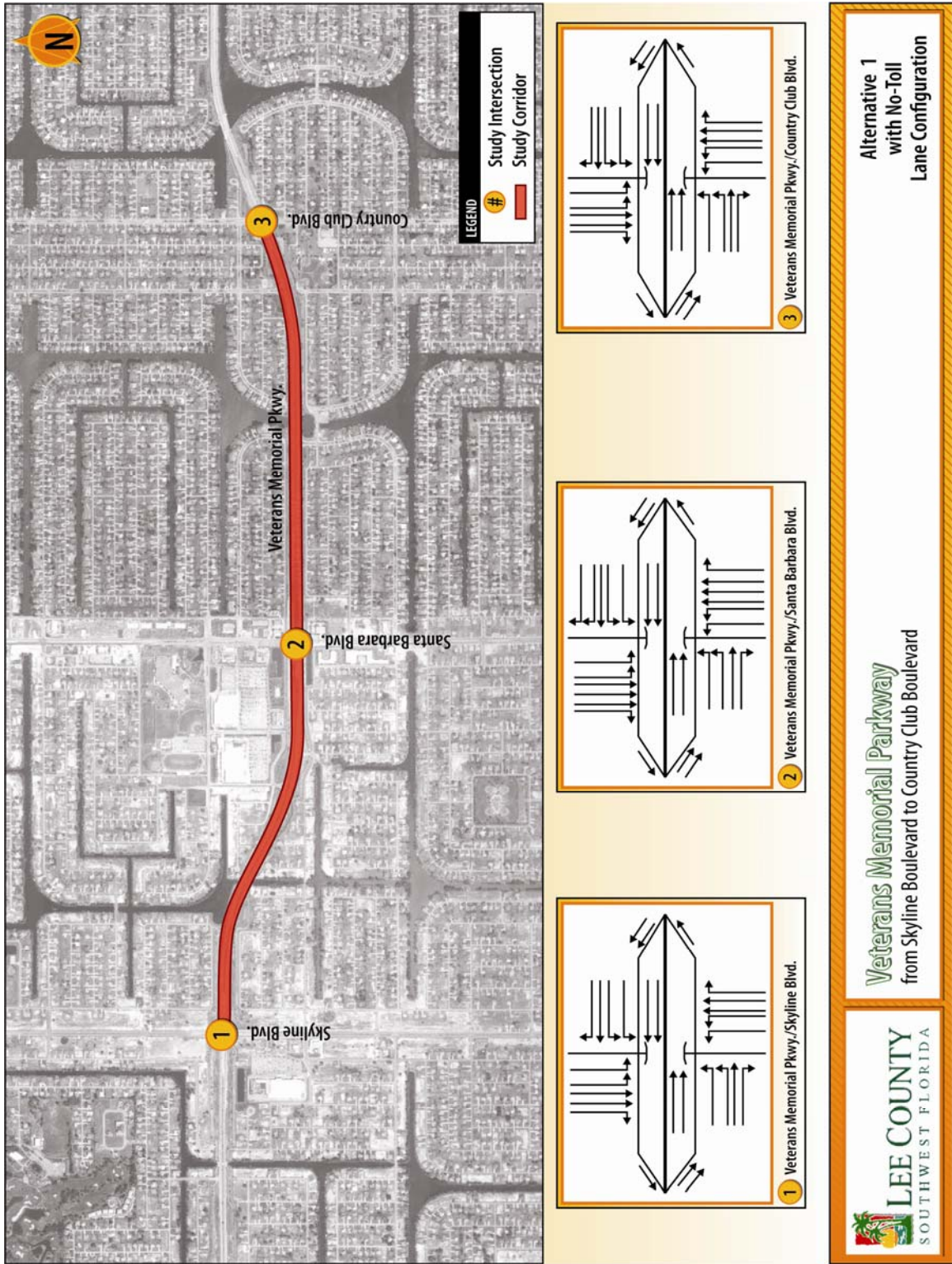
### 3.4.2 ALTERNATIVE 1 - BUILD ALTERNATIVE WITH NO-TOLLS

The calibrated existing *CORSIM* networks were modified to include four lane overpasses along Veterans Memorial Parkway at all of the intersections within the study area. The networks were updated to reflect the improvements included in the Lee-Collier County 2030 Cost Feasible Model networks. Veterans Memorial Parkway west of Skyline Boulevard was also assumed to be widened from a four-lane to a six-lane facility as proposed in the Lee-Collier County 2030 Cost Feasible Model. The resultant lane configuration for Alternative 1 is illustrated in **Figure 3-9**. The peak hour turning movement volumes shown in Figures 3-3 and 3-4 were used in *CORSIM* to develop future peak hour networks. Since the majority of traffic along Veterans Memorial Parkway was diverted to access the overpass, it was assumed that the cycle lengths for the signalized intersections will be reduced. The reduced signal cycle lengths are consistent with existing cycle lengths at the Veterans Memorial Parkway and Del Prado intersection. The phase splits were also adjusted to provide optimal performance for the 2015/2035 traffic conditions.

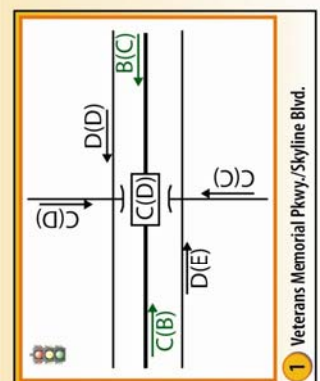
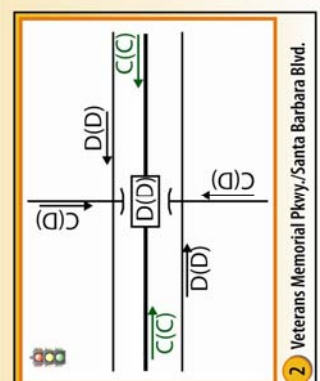
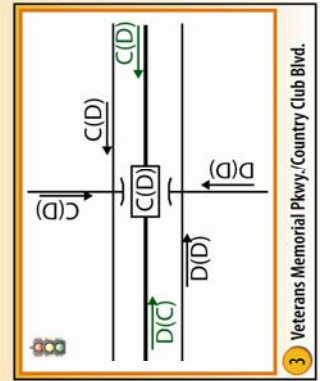
Similar to existing *CORSIM* analysis, the resultant future *CORSIM* networks were simulated ten times with randomly generated seed number for one hour and the results were averaged. The results of the *CORSIM* analysis of opening year (2015) and design year (2035) traffic conditions are provided in Appendix I. The opening year (2015) and design year (2035) delay and LOS information for intersections along Veterans Memorial Parkway at Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard are shown in **Figures 3-10** and **3-11**, and tabulated in **Table 3-4** and **Table 3-5** respectively. For comparison purposes, the overall network performance parameters from the *CORSIM* simulation results are provided in Section 3.5.

The proposed overpasses at intersections along the Veterans Memorial Parkway allowed majority of through traffic along Veterans Memorial Parkway to cross the intersections using the overpasses. The reduction in traffic volumes at the intersection below the overpass, and optimization of signal timings provided adequate green time for turn lanes along Veterans Memorial Parkway and for the intersecting cross street approaches. As seen in Tables 3-4 and 3-5, all of the intersections operated at LOS D or better during AM and PM peak conditions under both opening year (2015) and design year (2035) traffic conditions. As illustrated in Figures 3-10 and 3-11, the overpasses along Veterans Memorial Parkway also operated at an acceptable LOS.



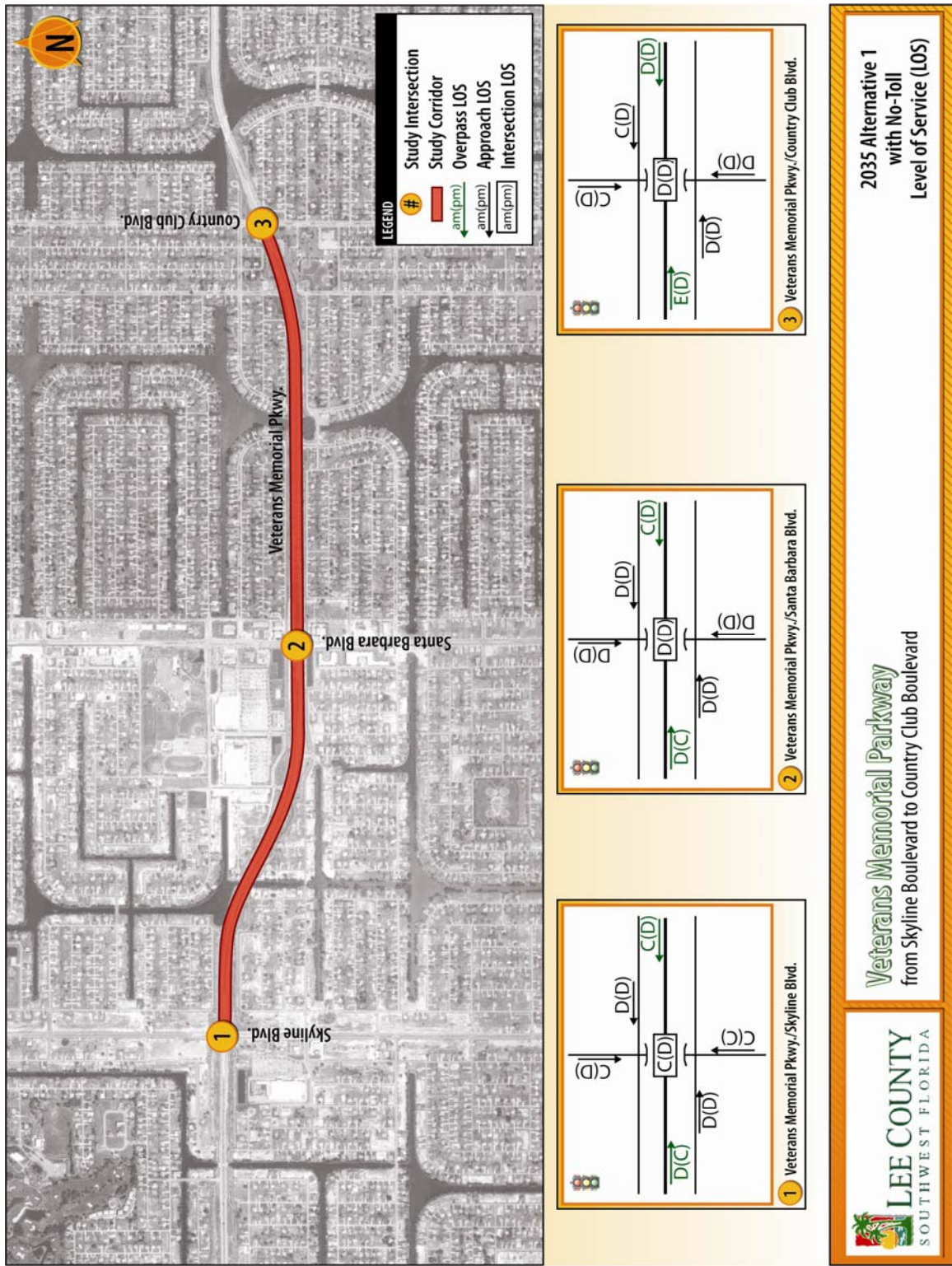


Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-9



**2015 Alternative 1  
with No-Toll  
Level of Service (LOS)**

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard



Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-11

**Table 3-4**  
**Alternative 1 – Summary of 2015 Operational Analysis**

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	43.6	D	56.1	E
	Westbound	39.9	D	46.7	D
	Northbound	25.3	C	31.3	C
	Southbound	34.3	C	46.6	D
	<b>Overall Intersection</b>	<b>33.4</b>	<b>C</b>	<b>43.3</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	38.7	D	42.6	D
	Westbound	39.8	D	46.9	D
	Northbound	32.6	C	41.8	D
	Southbound	34.6	C	43.3	D
	<b>Overall Intersection</b>	<b>35.6</b>	<b>D</b>	<b>43.7</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	36.0	D	47.4	D
	Westbound	30.7	C	37.3	D
	Northbound	35.7	D	43.1	D
	Southbound	33.9	C	45.0	D
	<b>Overall Intersection</b>	<b>34.2</b>	<b>C</b>	<b>43.1</b>	<b>D</b>

**Table 3-5**  
**Alternative 1 – Summary of 2035 Operational Analysis**

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	46.7	D	53.7	D
	Westbound	40.8	D	46.8	D
	Northbound	26.8	C	27.9	C
	Southbound	32.7	C	37.6	D
	<b>Overall Intersection</b>	<b>34.6</b>	<b>C</b>	<b>39.2</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	36.7	D	39.9	D
	Westbound	40.4	D	45.4	D
	Northbound	37.8	D	45.0	D
	Southbound	37.3	D	46.5	D
	<b>Overall Intersection</b>	<b>38.0</b>	<b>D</b>	<b>44.9</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	35.7	D	48.0	D
	Westbound	33.8	C	40.9	D
	Northbound	37.5	D	47.0	D
	Southbound	33.5	C	50.6	D
	<b>Overall Intersection</b>	<b>35.2</b>	<b>D</b>	<b>47.2</b>	<b>D</b>

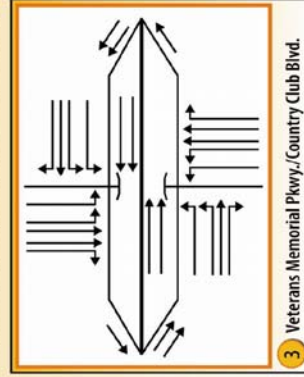
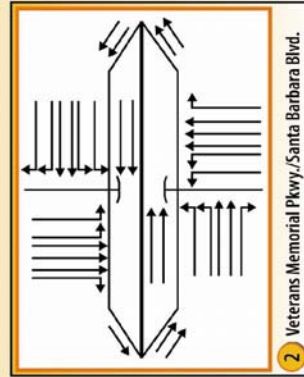
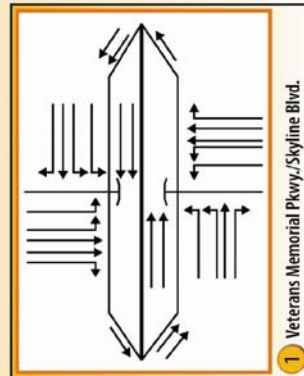
### 3.4.3 ALTERNATIVE 2 - BUILD ALTERNATIVE WITH TOLLS

The *CORSIM* networks developed for Alternative 1 – Build Alternative with No-Tolls, was modified to reflect traffic diversions recommended by the tolls feasibility analysis for this overpass. The opening year (2015) *CORSIM* network was developed using adjusted No-Build opening year (2015) peak hour volumes that considered shifting 60 percent of the through traffic to access the overpass at Veterans Memorial Parkway and Santa Barbara Boulevard intersection. The design year (2035) AM and PM peak hour *CORSIM* network were developed using adjusted 2035 No-Build volumes that considered shifting 65 percent of the through traffic to access the overpass at Veterans Memorial Parkway and Santa Barbara Boulevard intersection. The cycle lengths and phasing plan were kept consistent with Alternative 1; however, the signal phase splits were optimized to accommodate the additional through traffic along the Veterans Memorial Parkway frontage segments.

Alternative 1 assumes only one through lane along the Veterans Memorial Parkway frontage road at its intersection with Santa Barbara Boulevard. With the same single through lane considered under Alternative 2, this intersection failed to operate at an acceptable LOS during design year (2035) traffic conditions. Therefore, an additional through lane was added along eastbound and westbound frontage road approaches of Veterans Memorial Parkway at Santa Barbara Boulevard intersection to accommodate the 35-40 percent of the through traffic along Veterans Memorial Parkway. The additional through lane along the westbound frontage road was merged to form a single lane downstream of the intersection. The additional through lane along the eastbound frontage road was dropped at the adjacent downstream unsignalized intersection. The resultant lane configuration for Alternative 2 is illustrated in **Figure 3-12**.

The results of the *CORSIM* operational analyses for Alternative 2 under opening year (2015) and design year (2035) traffic conditions are provided in Appendix J. The opening year (2015) and design year (2035) delay and LOS information for intersections along the Veterans Memorial Parkway at Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard are shown in **Table 3-6** and **Table 3-7** respectively. **Figures 3-13** and **3-14** illustrate the results of the operational analysis for opening year (2015) and design year (2035) traffic conditions. For comparison purposes, the overall network performance parameters from the *CORSIM* simulation results are provided in Section 3.5.

Based on the simulation outputs for Alternative 2, the intersections yielded LOS D or better operating conditions for opening year (2015) and design year (2035) traffic conditions and were comparable to the results of Alternative 1. Since tolling was assumed for the overpass at the Veterans Memorial Parkway and Santa Barbara Boulevard intersection only, this intersection experienced higher intersection delay when compared to Alternative 1 which does not consider any tolls. Similar to Alternative 1, the overpasses along Veterans Memorial Parkway also operated at an acceptable LOS as illustrated in Figures 3-13 and 3-14.





**LEE COUNTY**  
SOUTHWEST FLORIDA

**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**Alternative 2**  
with Toll  
Lane Configuration

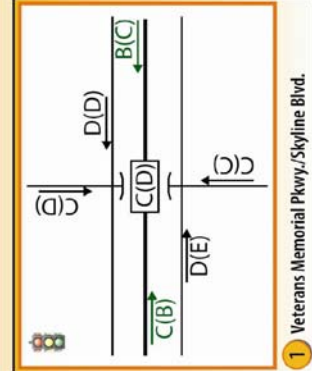
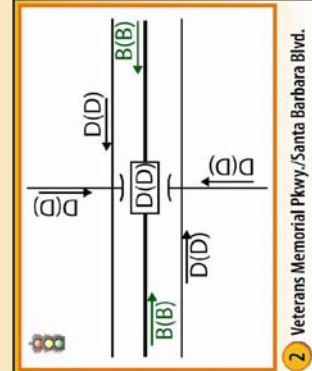
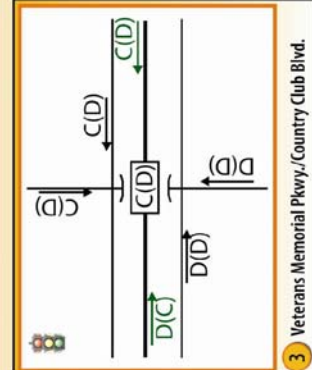
*Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-12*

**Table 3-6**  
**Alternative 2 – Summary of 2015 Operational Analysis**

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	43.4	D	56.7	E
	Westbound	39.6	D	44.7	D
	Northbound	24.7	C	31.0	C
	Southbound	34.1	C	47.1	D
	<b>Overall Intersection</b>	<b>33.0</b>	<b>C</b>	<b>42.8</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	43.6	D	46.2	D
	Westbound	41.0	D	43.9	D
	Northbound	39.8	D	47.6	D
	Southbound	40.3	D	47.8	D
	<b>Overall Intersection</b>	<b>41.2</b>	<b>D</b>	<b>46.2</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	37.1	D	45.0	D
	Westbound	30.0	C	38.4	D
	Northbound	35.2	D	42.2	D
	Southbound	34.6	C	43.5	D
	<b>Overall Intersection</b>	<b>34.3</b>	<b>C</b>	<b>42.2</b>	<b>D</b>

**Table 3-7**  
**Alternative 2 – Summary of 2035 Operational Analysis**

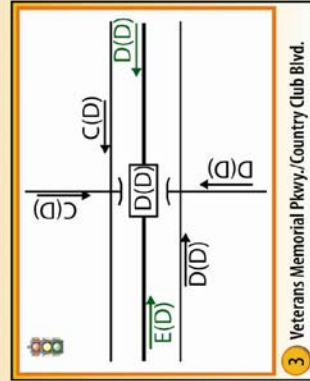
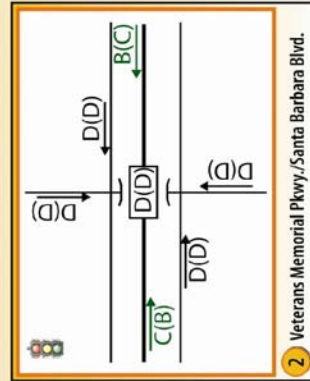
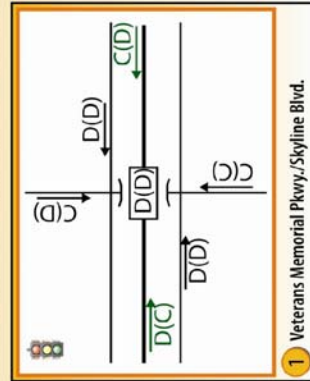
Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
		(Sec/Veh)		(Sec/Veh)	
<b>Veterans Memorial Parkway/ Skyline Boulevard (Signalized)</b>	Eastbound	47.0	D	53.4	D
	Westbound	41.3	D	45.6	D
	Northbound	27.1	C	28.3	C
	Southbound	33.3	C	37.8	D
	<b>Overall Intersection</b>	<b>35.1</b>	<b>D</b>	<b>39.1</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)</b>	Eastbound	42.9	D	53.7	D
	Westbound	41.9	D	45.7	D
	Northbound	47.3	D	48.6	D
	Southbound	49.3	D	49.5	D
	<b>Overall Intersection</b>	<b>45.3</b>	<b>D</b>	<b>49.0</b>	<b>D</b>
<b>Veterans Memorial Parkway/ Country Club Boulevard (Signalized)</b>	Eastbound	35.8	D	47.9	D
	Westbound	33.3	C	41.7	D
	Northbound	37.9	D	47.1	D
	Southbound	33.6	C	50.0	D
	<b>Overall Intersection</b>	<b>35.3</b>	<b>D</b>	<b>47.2</b>	<b>D</b>



**2015 Alternative 2  
with Toll  
Level of Service (LOS)**

**Veterans Memorial Parkway  
from Skyline Boulevard to Country Club Boulevard**





**Veterans Memorial Parkway**  
from Skyline Boulevard to Country Club Boulevard

**2035 Alternative 2**  
with Toll  
Level of Service (LOS)

**LEE COUNTY**  
SOUTHWEST FLORIDA

*Veterans Memorial Parkway and Santa Barbara Boulevard Overpass Study  
Final Report  
Figure 3-14*

### 3.5 OVERALL NETWORK PERFORMANCE

The future operational analysis involved analyzing future alternatives during AM and PM peak hour periods for opening year (2015) and design year (2035). This section summarizes the overall network parameters of all the future networks. The overall network parameters help determine the overall efficiency of the alternative and assist in choosing the most viable alternative by comparison. The definitions for the parameters are as explained in Section 2.0. **Table 3-8** shows the overall network demand volumes and the overall network processed volumes for each alternative. **Table 3-9** provides a comparison between *CORSIM* network parameters output for opening year (2015) and design year (2035) traffic conditions.

**Table 3-8  
Future Overall Network Demand and Processed Volumes**

Alternative	Peak	Overall Network Demand Volumes	Average Overall Network Processed Volumes	Percent Vehicles	
				Processed	Not Processed
2015 No-Build	AM	12,301	11,597	94.28%	5.72%
	PM	12,316	12,257	99.52%	0.48%
2015 Alternative 1	AM	12,301	12,346	100.37%	-0.37%
	PM	12,316	12,329	100.10%	-0.10%
2015 Alternative 2	AM	12,301	12,353	100.42%	-0.42%
	PM	12,316	12,344	100.23%	-0.23%
2035 No-Build	AM	14,949	12,820	85.76%	14.24%
	PM	15,124	12,976	85.80%	14.20%
2035 Alternative 1	AM	14,949	15,006	100.38%	-0.38%
	PM	15,124	15,139	100.10%	-0.10%
2035 Alternative 2	AM	14,949	15,006	100.38%	-0.38%
	PM	15,124	15,156	100.21%	-0.21%

By comparing demand volumes and processed volumes between alternatives, it is evident that the No-Build Alternative has the lowest percentage of processed vehicles and the highest percent of vehicles queued in the network waiting to be processed. Both Alternative 1 and Alternative 2 have all of the vehicle demand processed within the simulated one hour peak periods. A similar pattern is seen when comparing other network parameters shown in Table 3-9.

**Table 3-9  
Future Average Network Parameters**

Alternative	Peak Hour	Total Vehicle-Miles	Duration (Vehicle - Hours)				Speed (Mph)	Time (Min/Mile)	
			Move	Delay	Total	Move/Total		Delay	Total
2015 No-Build	AM	22,618	473	679	1,152	0.41	20	1.80	3.06
	PM	24,272	509	482	991	0.51	25	1.19	2.45
2015 Alternative 1	AM	24,108	496	174	669	0.74	36	0.43	1.67
	PM	24,158	496	200	697	0.71	35	0.50	1.73
2015 Alternative 2	AM	24,111	496	197	693	0.72	35	0.49	1.73
	PM	24,245	498	226	724	0.69	33	0.56	1.79
2035 No-Build	AM	24,733	517	1,130	1,648	0.32	15	2.74	4.00
	PM	25,271	530	1,656	2,187	0.24	12	3.94	5.19
2035 Alternative 1	AM	29,501	607	227	834	0.73	35	0.46	1.70
	PM	29,785	612	262	875	0.70	34	0.53	1.76
2035 Alternative 2	AM	29,503	607	259	866	0.70	34	0.53	1.76
	PM	29,718	611	296	907	0.67	33	0.60	1.83

## *Section 4.0*

# *SUMMARY*

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The purpose of this study was to evaluate existing conditions (2010), analyze opening year (2015) and design year (2035) future traffic operations in conjunction with the proposed overpass along Veterans Memorial Parkway. The intersection of Veterans Memorial Parkway and Santa Barbara Boulevard is signalized and is located in the City of Cape Coral, Florida. The *2030 Lee Plan* proposes overpasses along Veterans Memorial Parkway at the Skyline Boulevard, Santa Barbara Boulevard and Country Club Boulevard intersections.

The study area includes the three intersections mentioned above and the roadway segments between the intersections. The existing traffic operational analyses were performed using calibrated simulation networks created using the *CORSIM* traffic simulation tool. The *CORSIM* network was calibrated based on turning movement volumes, travel time surveys, and queues obtained during field observation. Based on the results of the *CORSIM* simulation, the eastbound and northbound approaches to the Veterans Memorial Parkway and Santa Barbara Boulevard intersection, failed to operate at an acceptable level of service (LOS) during at least one peak period. All other roadway segments and intersections along the Veterans Memorial Parkway operate at the LOS standard or better during AM and PM peak hours.

The future traffic analysis included analysis of No-Build Alternative, and Build Alternatives that consider overpasses along Veterans Memorial Parkway. The Build Alternatives included the following toll scenarios for the overpass at Santa Barbara Boulevard.

- Alternative 1 – Build Alternative with No-Toll
- Alternative 2 – Build Alternative with Toll

Alternative 2 – Build Alternative with Toll required an additional through lane along the eastbound and westbound frontage road approaches of Veterans Memorial Parkway at Santa Barbara Boulevard to accommodate vehicles preferring to bypass the toll.

Future traffic volumes were developed for opening year (2015) and design year (2035) No-Build traffic conditions. The No-Build traffic volumes were adjusted based on traffic diversions projected by the Lee-Collier County 2030 Cost Feasible Model for Alternative 1. For Alternative 2 the diversions were based on the Toll Feasibility analysis performed for this project. The No-Build Alternative failed to operate at an acceptable LOS standard during 2015 traffic conditions for the northbound and southbound Santa Barbara Boulevard approaches. Almost all approaches to intersections in the study area failed during the 2035 No-Build conditions.

Based on the simulations outputs for Alternative 1 and Alternative 2, under both alternatives, the intersections yielded LOS D or better operating conditions for opening year (2015) and design year (2035) traffic conditions. Under Alternative 2, the overpass at the Veterans Memorial Parkway and Santa Barbara Boulevard intersection was assumed to be tolled; therefore, this intersection experienced higher intersection delay when compared to Alternative 1 that does not consider any tolls. The overpasses along Veterans Memorial Parkway also operated at an acceptable LOS for both Build Alternatives.

From a traffic perspective, the No-Build Alternative fails to accommodate future traffic conditions. Both Alternative 1 - Build Alternative with No-Toll and Alternative 2 - Build Alternative with Toll are viable alternatives that meet and exceed the acceptable LOS standards.

## *Section 5.0*

# *REFERENCES*

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1. *Lee-Collier County 2030 Long Range Transportation Plan*; Lee County Metropolitan Planning Organization; Fort Myers, Florida; December 2005.
2. *2009 Florida Traffic Information DVD*; Florida Department of Transportation; Tallahassee, Florida; 2009.
3. *2009 Traffic Count Report*; Lee County Department of Transportation; Lee County, Florida; February 2009.
4. *The Lee Plan 2009 Codification (As amended through May 2009)*; Lee County Department of Community Development; Fort Myers, Florida; 2009.
5. *Traffic Software Integrated System (Version 6.1) CORSIM*; ITT Industries, Inc.; Colorado Springs, Colorado; 2003.
6. *Highway Capacity Manual*; Transportation Research Board, National Research Council; Washington, CD; 2000.
7. *Project Traffic Forecasting Handbook*; Florida Department of Transportation; Tallahassee, Florida; October 2002.
8. *FDOT TURNS5A*; Florida Department of Transportation; Tallahassee, Florida.

## ***APPENDICES***

- Appendix A: Raw Turning Movement Counts***
- Appendix B: 2009 AADT Volumes***
- Appendix C: Peak Hour Volume Calculations***
- Appendix D: Signal Operating Plans, Design Hour Truck Factors and Field Observations***
- Appendix E: Existing CORSIM Results and HCM Equivalency Tables***
- Appendix F: Growth Rate Traffic Memorandum***
- Appendix G: FDOT TURNS5A Outputs***
- Appendix H: No-Build CORSIM Results***
- Appendix I: Alternative 1 CORSIM Results***
- Appendix J: Alternative 2 CORSIM Results***

***APPENDIX A***  
***RAW TURNING MOVEMENT COUNTS***

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TMC201.VOL

\*\*\*\*\*  
 \* TURN COUNT SUMMARY REPORT(C) - VERSION 1.0 \*  
 \* HI-STAR(R) TURN COUNT APPROACH VOLUME DATA FOR TMC \*  
 \*\*\*\*\*

DATE: 10/18/07 \* START TIME - 0200 \* END TIME - 200  
 LOCATION : Veterans @ Skyline \* FILE - TMC201.VOL

COMMENTS:

EBR AND WBR WAS NOT INCLUDED BECAUSE HISTAR QUIT BECAUSE LOW BATTERY

\*\*\*\*\*  
 END TIMES - PEAK HOUR VOLUMES

\* 1800 - 4788 VPH \* 1700 - 4158 VPH \* 1900 - 4068 VPH \* 0800 - 4016 VPH  
 \* 1600 - 3753 VPH \* 1500 - 3739 VPH \* 0900 - 3718 VPH \* 1400 - 3392 VPH

\*\*\*\*\*

TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
200	0	4	7	1	3	0	0	6	0	4	11	0
215	1	3	2	1	11	0	2	4	0	5	13	0
230	1	0	4	1	2	0	0	6	0	4	3	0
245	0	4	1	0	2	0	0	9	0	4	8	0
300	0	1	4	3	1	0	0	2	0	2	2	0
315	1	1	0	2	0	0	0	6	0	12	7	0
330	1	2	3	5	2	0	1	11	0	3	2	0
345	0	15	3	0	1	1	0	10	0	6	4	0
400	0	4	1	3	0	1	0	11	0	1	3	0
415	1	4	6	1	0	0	1	21	0	1	12	0
430	3	12	9	12	2	1	3	34	0	3	5	0
445	1	3	11	5	2	0	1	25	0	5	10	0
500	3	7	13	11	3	0	1	43	0	0	13	0
515	3	9	12	11	8	0	2	65	0	4	22	0
530	3	27	25	26	10	1	0	79	0	4	27	0
545	4	31	35	20	24	3	1	125	0	39	29	0
600	9	29	59	42	20	2	3	214	0	37	44	0
615	13	43	76	51	24	3	74	238	0	12	69	0
630	15	86	97	111	30	8	21	371	0	19	146	0
645	20	92	125	136	71	16	86	354	0	38	171	0
700	13	136	93	73	55	1	41	306	0	65	136	0
715	27	100	82	133	58	11	68	343	0	65	125	0
730	24	149	110	97	71	13	94	277	0	67	140	0
745	14	85	96	71	77	20	95	328	0	74	183	0
800	25	71	94	80	175	22	15	327	0	163	142	0
815	18	60	66	75	61	10	96	316	0	47	138	0
830	19	85	90	80	61	9	19	262	0	56	154	0
845	25	66	85	63	70	10	26	284	0	52	201	0
900	23	157	78	135	81	17	12	272	0	52	124	0
915	24	93	76	79	60	7	62	208	0	51	141	0
930	15	103	61	77	57	5	80	262	0	42	136	0
945	33	73	84	94	68	7	39	188	0	55	147	0
1000	20	50	78	69	46	11	29	190	0	55	143	0
1015	36	81	85	24	44	6	70	179	0	54	134	0
1030	23	40	72	32	43	10	16	192	0	87	149	0
1045	18	55	58	82	40	6	44	181	0	88	145	0
1100	27	44	91	56	95	6	6	213	0	100	142	0
1115	18	56	70	53	47	6	38	163	0	153	175	0
1130	37	44	65	35	43	1	12	206	0	123	170	0
1145	17	59	69	117	56	7	16	154	0	110	147	0
1200	27	47	68	28	52	7	61	193	0	83	175	0
1215	23	51	68	12	35	7	8	172	0	63	171	0
1230	15	54	57	47	108	9	48	183	0	43	157	0
1245	29	51	58	57	58	10	32	153	0	79	180	0
1300	29	52	66	54	79	8	8	186	0	121	184	0
1315	28	55	62	31	61	14	68	162	0	92	176	0
1330	28	46	77	99	113	12	103	199	0	96	192	0

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1345	27	54	63	94	122	13	16	183	0	99	220	0
1400	44	88	75	72	123	10	77	198	0	59	196	0
1415	34	60	71	60	91	23	14	207	0	156	246	0
1430	37	91	82	36	65	19	7	218	0	127	234	0
1445	26	84	69	87	117	11	61	192	0	64	208	0
1500	23	81	57	35	63	7	30	190	0	78	283	0
1515	44	76	73	27	63	14	40	199	0	117	282	0
1530	20	72	71	76	76	21	21	218	0	182	298	0
1545	51	80	65	24	61	8	26	201	0	74	326	0
1600	29	72	53	48	71	12	30	251	0	64	284	0
1615	35	70	69	30	74	12	66	202	0	165	323	0
1630	30	75	72	62	109	13	100	193	0	96	308	0
1645	34	74	51	35	90	20	117	216	0	139	364	0
1700	38	74	86	35	83	14	169	200	0	163	360	0
1715	28	96	74	49	111	15	16	226	0	179	392	0
1730	46	82	60	37	88	11	29	205	0	108	357	0
1745	31	69	64	49	99	9	144	227	0	270	395	0
1800	42	77	80	25	75	14	20	189	0	184	411	0
1815	64	107	74	116	113	6	11	183	0	210	301	0
1830	27	60	71	33	101	13	12	140	0	118	252	0
1845	23	67	69	34	74	9	33	139	0	231	260	0
1900	24	73	74	24	46	10	22	135	0	75	236	0
1915	19	84	52	23	106	14	76	155	0	77	194	0
1930	25	60	78	29	80	11	11	180	0	168	254	0
1945	16	53	36	57	47	15	60	151	0	146	222	0
2000	19	38	37	31	71	8	16	128	0	97	171	0
2015	25	43	37	12	59	3	8	87	0	59	203	0
2030	19	36	38	18	50	8	7	114	0	76	208	0
2045	12	41	21	17	58	5	16	124	0	67	175	0
2100	16	61	27	89	41	4	5	135	0	65	150	0
2115	12	35	29	16	79	6	11	80	0	167	165	0
2130	1	26	19	11	48	7	8	72	0	87	150	0
2145	10	22	17	17	38	1	3	55	0	69	120	0
2200	9	33	18	15	35	6	8	50	0	60	107	0
2215	6	22	19	16	27	0	51	67	0	80	112	0
2230	6	44	11	11	50	3	0	49	0	53	111	0
2245	3	15	10	9	14	5	6	41	0	67	66	0
2300	4	18	19	58	24	2	0	40	0	26	73	0
2315	6	9	15	4	22	2	22	23	0	18	50	0
2330	4	6	9	4	23	4	5	23	0	16	54	0
2345	3	33	7	8	12	0	0	21	0	20	39	0
2400	1	30	4	62	6	3	1	21	0	17	46	0
2415	4	9	10	1	26	1	0	13	0	41	35	0
2430	6	9	9	0	10	1	4	14	0	16	14	0
2445	1	10	7	3	4	1	2	11	0	7	15	0
100	0	4	3	7	14	1	3	6	0	9	20	0
115	1	6	3	6	4	1	0	4	0	8	20	0
130	0	4	2	4	2	0	0	7	0	9	15	0
145	0	3	2	6	1	0	0	5	0	3	19	0

\*\*\*\*\*

END OF DATA

TMC205.VOL

\*\*\*\*\*  
 \* TURN COUNT SUMMARY REPORT(C) - VERSION 1.0 \*  
 \* HI-STAR(R) TURN COUNT APPROACH VOLUME DATA FOR TMC \*  
 \*\*\*\*\*

DATE: 02/04/09 \* START TIME - 1100 \* END TIME - 1100  
 LOCATION : Veterans at Santa Barbar \* FILE - TMC205.VOL

\*\*\*\*\*  
 COMMENTS:

\*\*\*\*\*  
 END TIMES - PEAK HOUR VOLUMES  
 \* 1800 - 5970 VPH \* 1700 - 5696 VPH \* 1600 - 5145 VPH \* 0800 - 5045 VPH  
 \* 1500 - 4983 VPH \* 1900 - 4788 VPH \* 1400 - 4419 VPH \* 0900 - 4351 VPH  
 \*\*\*\*\*

TIME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WR1
1100	20	80	69	104	99	36	53	233	24	43	180	44
1115	21	103	55	85	98	22	75	178	23	55	139	41
1130	25	84	64	81	82	33	52	229	20	38	168	46
1145	29	120	64	164	124	26	74	186	23	78	144	47
1200	34	110	74	115	105	39	77	200	38	73	178	58
1215	31	113	60	100	113	44	79	194	19	76	174	38
1230	36	72	80	102	110	31	60	218	22	57	216	45
1245	31	112	67	176	129	48	73	200	19	69	151	38
1300	30	101	65	100	90	26	67	224	24	56	180	36
1315	26	114	61	108	127	31	66	184	19	67	173	46
1330	35	106	86	132	114	40	55	244	25	60	197	65
1345	34	123	61	135	181	48	84	225	21	87	198	42
1400	40	110	72	145	136	38	90	247	26	87	238	63
1415	46	126	101	125	131	46	74	167	35	82	211	50
1430	28	133	69	135	130	48	85	271	21	79	214	36
1445	31	107	75	160	145	44	59	222	21	100	233	51
1500	45	128	61	126	113	42	61	194	33	97	249	46
1515	42	131	62	105	135	39	64	243	23	89	261	52
1530	38	141	100	119	134	46	84	254	23	105	290	74
1545	41	133	70	134	114	43	50	218	25	100	288	80
1600	30	102	63	123	145	34	72	212	36	98	334	61
1615	47	112	75	152	131	26	124	237	25	142	323	80
1630	59	125	65	119	155	37	70	186	22	137	352	111
1645	82	136	65	102	158	46	69	205	23	146	378	64
1700	89	124	63	114	146	43	53	202	29	142	400	74
1715	51	132	63	100	127	32	61	226	37	162	417	85
1730	35	125	78	105	160	48	75	236	33	155	411	101
1745	35	136	70	115	112	41	75	191	23	135	403	100
1800	30	122	87	119	130	43	68	192	25	108	336	61
1815	32	114	74	112	115	45	65	190	26	120	319	58
1830	39	120	50	116	138	34	47	159	18	92	261	64
1845	26	97	72	101	106	23	58	172	20	79	252	53
1900	24	95	32	78	73	39	50	114	23	97	208	52
1915	16	81	31	91	110	48	30	97	16	84	199	38
1930	28	59	32	75	97	28	26	90	15	85	187	43
1945	18	85	50	56	97	29	24	91	15	64	178	41
2000	14	53	30	59	79	27	28	66	10	63	145	34
2015	12	69	23	67	87	24	26	88	10	55	148	44
2030	19	40	20	52	79	17	28	94	13	58	147	36
2045	18	54	19	71	81	25	25	88	7	70	148	35
2100	22	44	23	41	74	28	22	72	6	45	123	28
2115	22	48	16	47	107	21	16	66	9	57	141	28
2130	20	45	24	41	45	18	16	65	10	41	120	22
2145	9	34	23	34	49	12	11	47	6	57	114	21
2200	12	39	22	20	52	12	11	54	6	48	97	22
2215	2	30	16	22	42	9	9	35	8	38	90	17
2230	14	29	14	16	19	10	13	42	4	32	81	12

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2245	2	25	15	21	55	9	8	20	9	24	62	16
2300	4	22	10	20	19	9	2	28	1	28	65	15
2315	5	18	0	8	20	6	5	24	2	18	41	13
2330	2	15	5	13	24	2	6	17	3	15	40	4
2345	4	8	4	12	7	4	5	19	2	9	33	11
2400	2	7	6	11	15	3	1	12	1	12	27	4
2415	3	7	1	5	7	3	2	6	4	9	25	2
2430	2	6	3	3	6	5	4	10	2	4	30	4
2445	3	13	7	3	12	2	0	8	1	8	22	5
100	3	9	4	6	9	1	0	8	0	8	20	0
115	2	5	3	4	3	1	1	7	0	7	18	0
130	1	4	2	3	5	2	0	4	1	3	10	1
145	0	1	3	6	4	1	0	6	2	4	4	2
200	2	6	4	5	11	0	2	3	0	2	15	6
215	1	3	5	3	2	5	2	6	1	5	17	4
230	0	2	3	4	3	3	3	9	0	5	6	3
245	0	3	1	4	5	4	0	16	1	6	6	1
300	2	6	3	5	2	0	2	8	0	5	10	0
315	0	2	4	4	4	1	3	14	2	4	10	2
330	1	2	6	3	4	3	2	15	1	4	3	1
345	0	6	6	11	5	1	1	17	3	6	6	1
400	0	5	5	10	2	1	0	22	1	1	3	2
415	1	4	11	11	3	1	9	33	0	1	4	0
430	3	5	13	26	5	0	2	49	3	1	4	1
445	2	7	12	11	7	1	8	39	3	3	16	1
500	4	6	10	22	12	0	4	35	4	2	11	2
515	4	18	18	27	16	2	7	66	5	3	17	1
530	3	20	28	45	21	6	7	119	3	4	23	1
545	3	19	38	92	10	7	10	122	12	5	23	5
600	3	29	49	65	20	9	15	175	12	16	30	7
615	19	38	86	98	54	12	18	227	20	13	43	10
630	22	87	99	114	68	25	42	276	23	38	90	17
645	61	117	109	124	75	19	86	356	33	28	130	34
700	72	88	113	173	99	15	64	384	41	36	116	25
715	17	74	153	159	117	19	35	437	41	59	123	29
730	60	102	193	121	119	20	37	449	40	49	128	25
745	29	107	147	128	95	21	70	361	42	43	141	29
800	28	103	113	138	95	24	63	385	44	35	124	31
815	13	65	92	103	92	17	56	321	26	47	140	25
830	18	69	106	115	100	25	43	342	40	48	141	34
845	18	77	101	168	95	32	56	289	28	43	144	39
900	21	75	93	91	61	36	55	279	26	32	125	24
915	18	100	56	152	94	32	59	247	35	42	134	32
930	83	64	88	128	98	26	52	281	26	47	156	27
945	15	96	66	122	100	25	74	240	25	50	123	38
1000	23	59	71	98	80	22	37	220	16	38	114	38
1015	24	76	87	100	80	23	63	210	13	49	162	28
1030	24	81	73	91	101	29	60	205	20	53	152	32
1045	17	94	53	166	82	31	71	227	22	52	151	31

\*\*\*\*\*

END OF DATA

***APPENDIX B***  
***2009 AADT VOLUMES***

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FLORIDA DEPARTMENT OF TRANSPORTATION  
2009 Annual Average Daily Traffic Report - Report Type: COUNTY

County: 12     LEE

Site	Site Type	Description	Direction 1	Direction 2	AADT Two-Way	"K" Fctr	Demand K100	"D" Fctr	Demand D100
2050		VETERANS BLVD, E OF SANTA BARBARA BLVD TTMS 60	E 27500E	W 26500E	54000 F	10.14F	9.47	57.25F	52.00
2055		SANTA BARBARA BLVD, S OF SW 28TH ST & VETERANS P	N 11000E	S 11000E	22000 F	10.14F	9.47	57.25F	52.00
3043		COUNTRY CLUB BLVD, S OF VETERANS BLVD CC	N 7100E	S 7000E	14100 F	10.14F	9.47	57.25F	52.00
4513		VETERANS BLVD, E OF COUNTRY CLUB BLVD LC 513	E 27000E	W 26500E	53500 F	10.14F	9.47	57.25F	52.00
4522		MIRACLE PKWY/VETERANS PKWY, E OF SKYLINE BLVD	E 19500E	W 19500E	39000 F	10.14F	9.47	57.25F	52.00
6050	T	VETERAN'S PKWY, W OF ACADEMY BLVD, PTMS 2050, LC	E 23972	W 23292	47264 C	9.79P	9.36	68.04P	55.29
6054	T	SANTA BARBARA BLVD, AT SW 22 TERRACE, PTMS 2054,	N 10939	S 11154	22093 C	9.66P	9.23	50.97P	59.18
6055	T	SANTA BARBARA BLVD, S OF SW 28TH ST & VETERANS P	N 0	S 0	25092 C	9.56P	9.18	55.11P	59.18

Site Type : P= Portable; T= Telemetered

AADT Flags : C= Computed; E= Manual Est; F= First Year Est; S= Second Year Est; T= Third Year Est; X= Unknown

"K/D" Flags : A= Actual; F= Volume Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; W= One-Way Road

"T" Flags : A= Actual; F= Axle Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; X= Cross-Reference

# PERIODIC COUNT STATION DATA

STREET	LOCATION	Sta- tion #	M A P	Daily Traffic Volume (AADT)											CS	Area
				2000	2001	2002	2003	2004	2005	2006	2007	2008	2009			
US 41 (SR 45)	N OF BOY SCOUT DR	430	B	39600	39900	42000	42200	45900	44100	45700	42700	38400	36200	9	3	
	N OF N AIRPORT RD	427	B	44200	43800	43900	44800	52900	45000	50500	49600	43500	38100	9	3	
	N OF COLONIAL BLVD	432	B	48600	44600	51000	48200	49200	50300	52000	51600	46800	35500	9	3	
	N OF WINKLER AVE	429	B	41900	43700	45300	44500	48200	38500	50600	53000	52100	42000	9	3	
	N OF HANSON ST	428	B	40700	45700	43900	43800	47400	45600	46600	46400	43200	40400	9	3	
	N OF NORTH KEY DR	1	C	39700	41700	43500	45600	49900	52100	51900	U/C	42600	41800		2	
	N OF HANCOCK BR. PWY	421	C	28500	29500	29700	31600	31600	34400	39500	32700	29900	32700	1	2	
	N OF PONDELLA RD	431	C	21000	23800	25000	25900	28900	27800	32100	26300	24900	26800	1	2	
	N OF PINE ISLAND RD	419	C	20000	22500	22900	24300	24700	25700	30800	25100	26100	21600	1	2	
	N OF LITTLETON RD	425	C	15600	17100	17400	18200	20000	20400	23000	18300	17700	15700	1	2	
	S OF CHARLOTTE CO.	449	I	12800	14600	14800	15400	18000	18700	18400	15500	20700	13900	1	2	
VANDERBILT RD	S OF BONITA BEACH RD	491	H	8500	N/A	7300	9300	9000	9600	7800	6100	5700	5100	23	6	
VETERANS PKWY	S OF PINE ISLAND RD	527	I			6100	8200	10600	12100	13600	14100	12900	13300	50	1	
	E OF SURFSIDE BLVD	526	I				10800	13800	16400	18500	20100	19500	18700	50	1	
	E OF CHIQUITA BLVD	523	C	9100	12000	15900	19200	23900	25700	27500	29500	28200	26800	50	1	
	E OF SKYLINE BLVD	522	C	15900	19200	23400	26700	32500	35300	40200	40000	36800	38400	50	1	
	E OF SANTA BARBARA BLVD	50	C	31400	33800	40300	44300	48000	50700	53100	49600	47200	46900		1	
	E OF COUNTRY CLUB BLVD	513	C	36800	38700	44800	45900	50800	51400	58200	57400	49800	50800	50	1	
	AT TOLL PLAZA	101	C	37500	37700	41800	44500	47600	49600	50100	48100					
VIA COCONUT	S OF WILLIAMS RD	454									5100	5600	4500	61	6	
WEST TERRY ST	E OF US 41	440	H	10800	11100	13300	13300	12000	11400	12200	12200	11600	11500	42	6	
WESTGATE BLVD	S OF LEE BLVD	470	F					7300	6700	12000	8800	6400	6700	22	5	

# PERIODIC COUNT STATION DATA

STREET	LOCATION	Sta- tion #	M A P	Daily Traffic Volume (AADT)											CS	Area
				2000	2001	2002	2003	2004	2005	2006	2007	2008	2009			
SAN CARLOS BLVD	E OF US 41	423	H	5200	5600	4900	5000	5500	5300	5100	5000	4500	4400	15	4	
SANIBEL /CAPTIVA RD	N OF BLIND PASS BRIDGE	319						5700	5600	6000	6500	6500	4600	36	7	
	W OF TARPON BAY RD	383	I	10000	10300	9600	10400	9300	9200	8000	9800	5200	9000	36	7	
SANIBEL CAUSEWAY	TOLL PLAZA	102	I					16300	15600	15700	U/C					
SANIBEL BLVD	E OF US 41	467	H	7400	9400	N/A	9200	9700	11000	12000	9500	10000	9300	25	4	
SANTA BARBARA BV	S OF SW 22 TERR	54				21800	23500	27300	29500	25100	27700	26500	21700			
	S OF SW 28 ST	55				21500	23000	26200	23000	27900	27700	25800				
SHELL POINT BLVD	N OF MCGREGOR BLVD	385	G	4300	4100	4300	4100	4200	4400	4600	5400	3300	4600	36	7	
SENTINELA BLVD	E OF MOORE AVE	478	F	100	400	500	600	700		1700	1600	1200	1000	6	5	
VERONICA SHOEMAKER BL	S OF PALM BEACH BV	605	A	4600	4700	4700	4900	5500	5600	5600	6800	5500	4900	20	3	
	N OF M.L.K. BLVD (SR 82)	606	A	7800	8300	8900	9400	9100	8100	U/C	10100	9000	8100	20	3	
	N OF COLONIAL BLVD	607	B	1100	800	1000	900	1000	1500	2600	6600	6000	5400	20	3	
SIX MILE CYPRESS	E OF US 41	386	G	30300	33800	33100	35400	36900	35200	33600	31800	29200	29400	46	4	
PARKWAY	E OF METRO PKWY	387	G	17800	19700	20300	23600	25400	26400	23600	25200	22900	21600	46	4	
	N OF DANIELS PKWY	388	G	11100	13000	14600	15200	19900	19800	19200	20100	16200	17800	18	3	
	N OF WINKLER AVE	18	E	9900	10400	10000	11000	13900	15500	15700	16000	14000	13400		3	

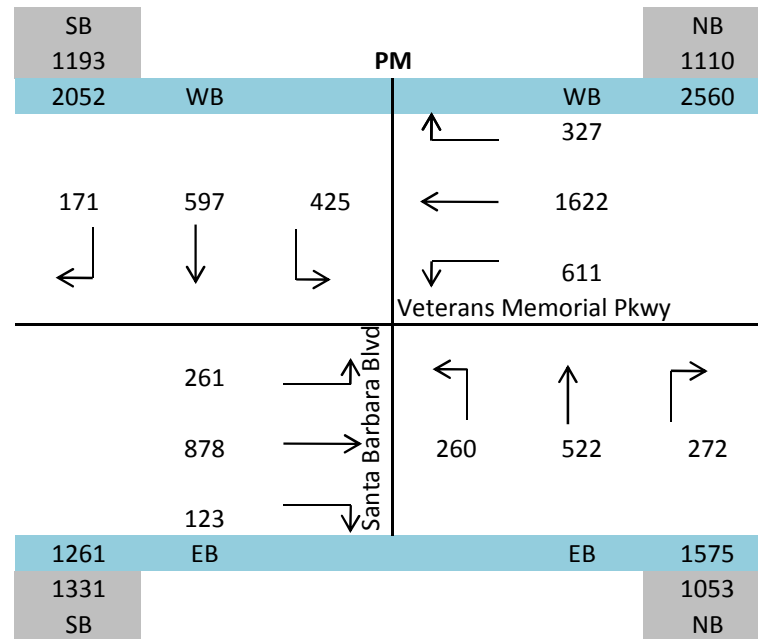
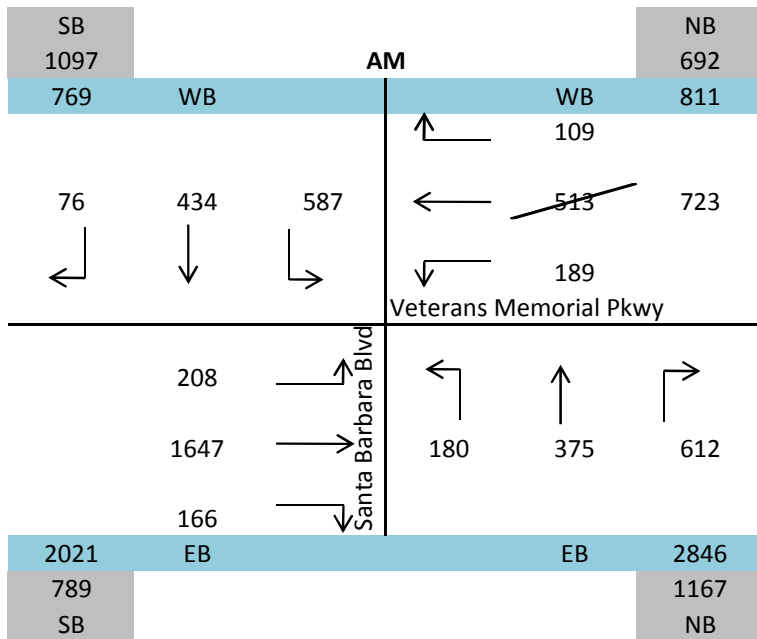


***APPENDIX C***  
***PEAK HOUR VOLUME CALCULATIONS***

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TIME	Santa Barbara Boulevard			Santa Barbara Boulevard			Veterans Parkway			Veterans Parkway			Total
	Northbound			Southbound			Eastbound			Westbound			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0700-0715	72	88	113	173	99	15	64	384	41	36	116	25	1226
0715-0730	17	74	153	159	117	19	35	437	41	59	123	29	1263
0730-0745	60	102	193	121	119	20	37	449	40	49	128	25	1343
0745-0800	29	107	147	128	95	21	70	361	42	43	141	29	1213
<b>Total</b>	<b>178</b>	<b>371</b>	<b>606</b>	<b>581</b>	<b>430</b>	<b>75</b>	<b>206</b>	<b>1631</b>	<b>164</b>	<b>187</b>	<b>508</b>	<b>108</b>	<b>5045</b>
1645-1700	82	136	65	102	158	46	69	205	23	146	378	64	1474
1700-1715	89	124	63	114	146	43	53	202	29	142	400	74	1479
1715-1730	51	132	63	100	127	32	61	226	37	162	417	85	1493
1730-1745	35	125	78	105	160	48	75	236	33	155	411	101	1562
<b>Total</b>	<b>257</b>	<b>517</b>	<b>269</b>	<b>421</b>	<b>591</b>	<b>169</b>	<b>258</b>	<b>869</b>	<b>122</b>	<b>605</b>	<b>1606</b>	<b>324</b>	<b>6008</b>
<b>Adjusted AM</b>	<b>180</b>	<b>375</b>	<b>612</b>	<b>587</b>	<b>434</b>	<b>76</b>	<b>208</b>	<b>1647</b>	<b>166</b>	<b>189</b>	<b>513</b>	<b>109</b>	
<b>Adjusted PM</b>	<b>260</b>	<b>522</b>	<b>272</b>	<b>425</b>	<b>597</b>	<b>171</b>	<b>261</b>	<b>878</b>	<b>123</b>	<b>611</b>	<b>1622</b>	<b>327</b>	

PSCF: 1.01

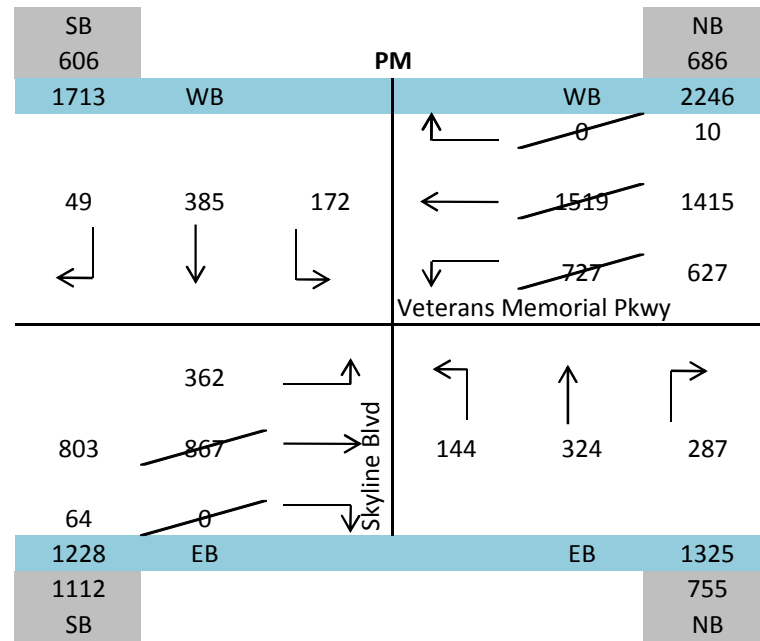
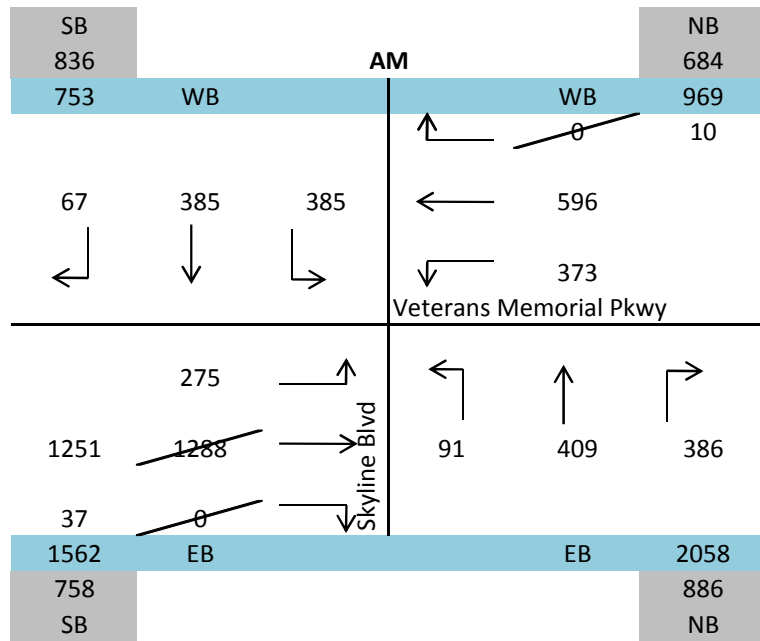


Veterans and Santa Barbara: AM Peak Hour 07:00 - 08:00

Veterans and Santa Barbara: PM Peak Hour 16:30 - 17:30

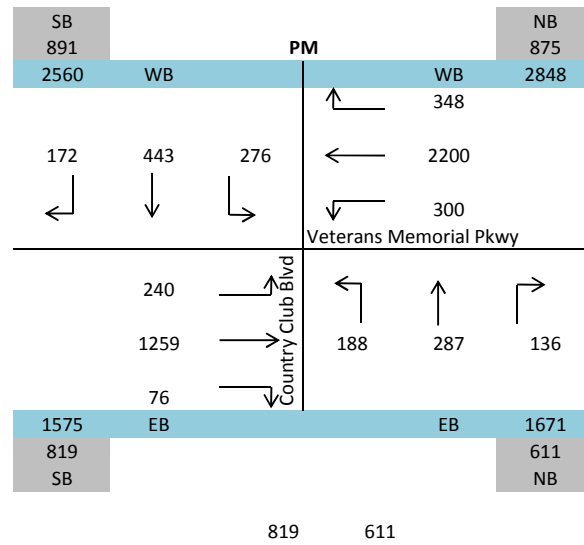
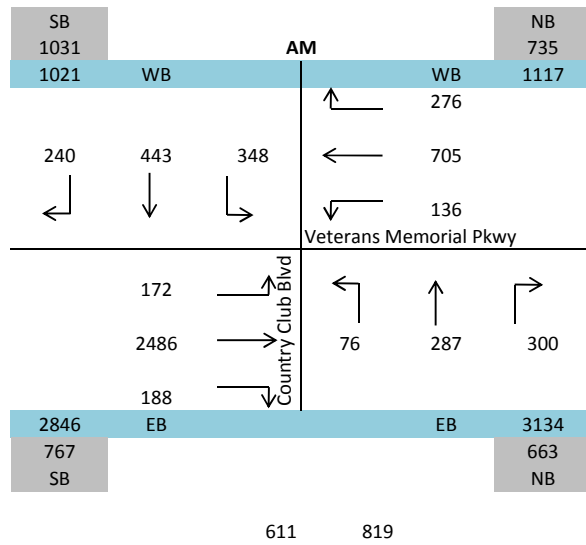
TIME	Skyline Boulevard			Skyline Boulevard			Veterans Parkway			Veterans Parkway			Total
	Northbound			Southbound			Eastbound			Westbound			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0715-0730	27	100	82	133	58	11	68	343	0	65	125	0	1012
0730-0745	24	149	110	97	71	13	94	277	0	67	140	0	1042
0745-0800	14	85	96	71	77	20	95	328	0	74	183	0	1043
0800-0815	25	71	94	80	175	22	15	327	0	163	142	0	1114
<b>Total</b>	<b>90</b>	<b>405</b>	<b>382</b>	<b>381</b>	<b>381</b>	<b>66</b>	<b>272</b>	<b>1275</b>	<b>0</b>	<b>369</b>	<b>590</b>	<b>0</b>	<b>4211</b>
1700-1715	38	74	86	35	83	14	169	200	0	163	360	0	1222
1715-1730	28	96	74	49	111	15	16	226	0	179	392	0	1186
1730-1745	46	82	60	37	88	11	29	205	0	108	357	0	1023
1745-1800	31	69	64	49	99	9	144	227	0	270	395	0	1357
<b>Total</b>	<b>143</b>	<b>321</b>	<b>284</b>	<b>170</b>	<b>381</b>	<b>49</b>	<b>358</b>	<b>858</b>	<b>0</b>	<b>720</b>	<b>1504</b>	<b>0</b>	<b>4788</b>
<b>Adjusted AM</b>	<b>91</b>	<b>409</b>	<b>386</b>	<b>385</b>	<b>385</b>	<b>67</b>	<b>275</b>	<b>1288</b>	<b>0</b>	<b>373</b>	<b>596</b>	<b>0</b>	
<b>Adjusted PM</b>	<b>144</b>	<b>324</b>	<b>287</b>	<b>172</b>	<b>385</b>	<b>49</b>	<b>362</b>	<b>867</b>	<b>0</b>	<b>727</b>	<b>1519</b>	<b>0</b>	

PSCF: 1.01

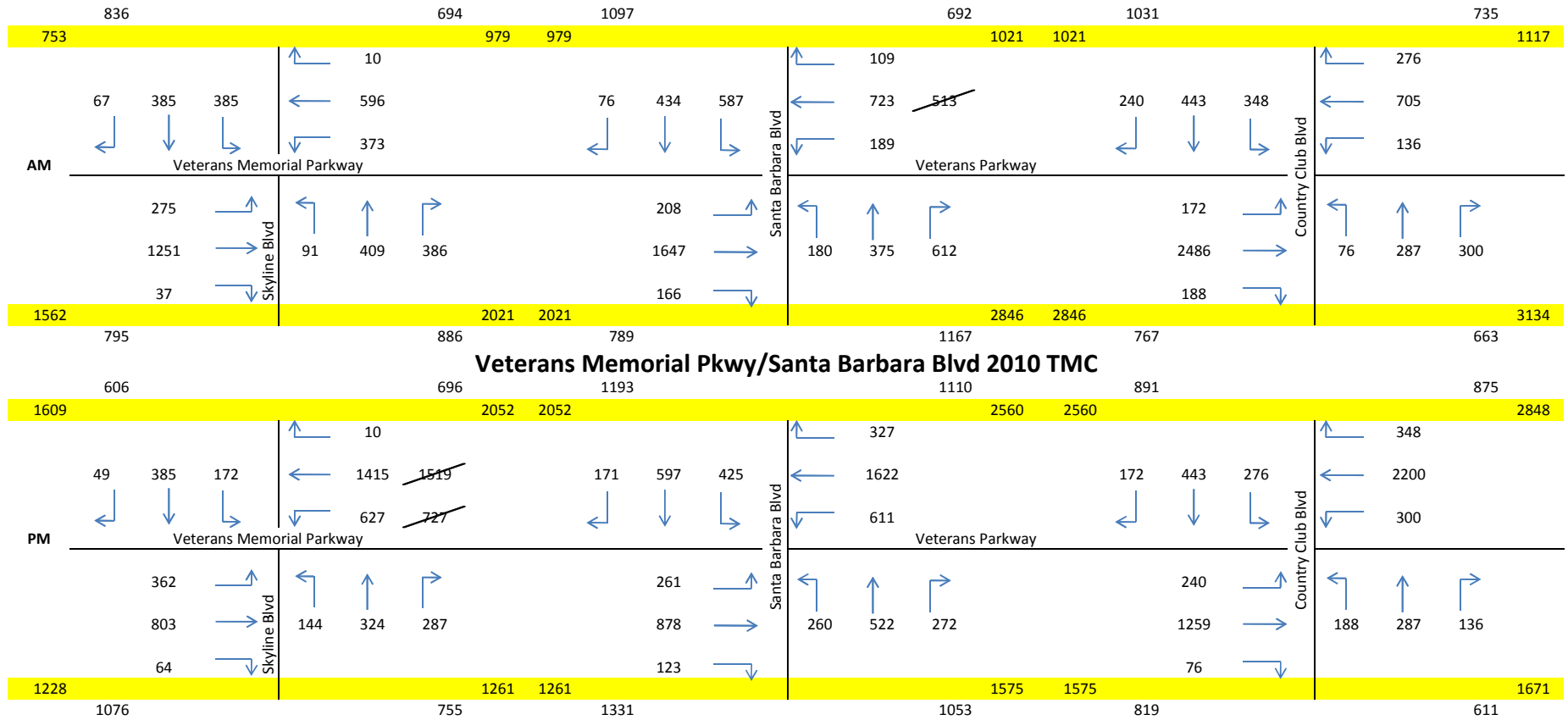


Veterans and Santa Barbara: AM Peak Hour 07:00 - 08:00

Veterans and Santa Barbara: PM Peak Hour 16:30 - 17:30



D30 57.25  
 K 30 10.14  
 AADT 14100



***APPENDIX D***  
***SIGNAL OPERATING PLANS, DESIGN HOUR TRUCK***  
***FACTORS AND FIELD OBSERVATIONS***

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Coordination Patterns

-----  
 Pattern 11

Cycle Length . . . 110 COS . . . . . 111  
 Offset . . . . . 20  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 16 2- 47 3- 17 4- 20  
           Phase 5- 18 6- 45 7- 15 8- 22  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 21

Cycle Length . . . 120 COS . . . . . 211  
 Offset . . . . . 40  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 15 2- 50 3- 16 4- 19  
           Phase 5- 17 6- 48 7- 14 8- 21  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 32

Cycle Length . . . 130 COS . . . . . 322  
 Offset . . . . . 82  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 15 2- 48 3- 18 4- 19  
           Phase 5- 24 6- 39 7- 14 8- 23  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----



Coordination Patterns

-----  
 Pattern 51

Cycle Length . . . 150 COS . . . . . 511  
 Offset . . . . . 49  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 28 2- 31 3- 21 4- 20  
           Phase 5- 11 6- 48 7- 15 8- 26  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 61

Cycle Length . . . 180 COS . . . . . 611  
 Offset . . . . . 37  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 22 2- 42 3- 18 4- 18  
           Phase 5- 10 6- 54 7- 10 8- 26  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 62

Cycle Length . . . 180 COS . . . . . 622  
 Offset . . . . . 58  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 12 2- 56 3- 13 4- 19  
           Phase 5- 19 6- 49 7- 12 8- 20  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----



Coordination Patterns

-----  
 Pattern 11

Cycle Length . . . 110 COS . . . . . 111  
 Offset . . . . . 0  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 18 2- 33 3- 25 4- 24  
           Phase 5- 22 6- 29 7- 14 8- 35  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 21

Cycle Length . . . 120 COS . . . . . 211  
 Offset . . . . . 0  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 19 2- 35 3- 23 4- 23  
           Phase 5- 21 6- 33 7- 14 8- 32  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 22

Cycle Length . . . 120 COS . . . . . 222  
 Offset . . . . . 0  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 16 2- 34 3- 20 4- 30  
           Phase 5- 29 6- 21 7- 15 8- 35  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----

Coordination Patterns

-----  
 Pattern 32

Cycle Length . . . 130 COS . . . . . 322  
 Offset . . . . . 97  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 15 2- 36 3- 23 4- 26  
           Phase 5- 26 6- 25 7- 19 8- 30  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 51

Cycle Length . . . 150 COS . . . . . 511  
 Offset . . . . . 0  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 17 2- 30 3- 29 4- 24  
           Phase 5- 14 6- 33 7- 14 8- 39  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 61

Cycle Length . . . 180 COS . . . . . 611  
 Offset . . . . . 0  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 17 2- 30 3- 28 4- 25  
           Phase 5- 11 6- 36 7- 12 8- 41  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----

Coordination Patterns

```

-----
Pattern 62
Cycle Length . . . 180    COS . . . . . 622
Offset . . . . . 0
Vehicle Permissive . . [1]    0    [2]    0
Vehicle Perm 2 Displacement 0    Phase Reservice. . NO
Splits:    Phase 1- 17  2- 39  3- 21  4- 23
           Phase 5- 23  6- 33  7- 12  8- 32
           Phase 9-  0 10-  0 11-  0 12-  0    Split Sum: 0
Split Extension/Ring [1]    0    [2]    0
Split Demand Pattern [1]    0    [2]    0
XRT Pattern. . . 0
  Phase Number:  1    2    3    4    5    6    7    8    9    10   11   12
Coord Phases . . . . X . . . . X . . . . . . . .
Veh Recall . . . . . . . . . . . . . . . . . .
Veh Max Recall . . X . . . . X . . . . . . . .
Ped Recall . . . . . . . . . . . . . . . . . .
Veh Omit . . . . . . . . . . . . . . . . . .
Alt Sequence . . A: . B: . C: . D: . E: . F: .
-----
    
```



Coordination Patterns

-----  
 Pattern 11

Cycle Length . . . 110 COS . . . . . 111  
 Offset . . . . . 39  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 13 2- 50 3- 15 4- 22  
           Phase 5- 18 6- 45 7- 13 8- 24  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 21

Cycle Length . . . 120 COS . . . . . 211  
 Offset . . . . . 39  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 13 2- 52 3- 14 4- 21  
           Phase 5- 17 6- 48 7- 13 8- 22  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 32

Cycle Length . . . 130 COS . . . . . 322  
 Offset . . . . . 39  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 11 2- 54 3- 13 4- 22  
           Phase 5- 34 6- 31 7- 11 8- 24  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----

Coordination Patterns

-----  
 Pattern 51

Cycle Length . . . 150 COS . . . . . 511  
 Offset . . . . . 69  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 11 2- 49 3- 15 4- 25  
           Phase 5- 18 6- 42 7- 10 8- 30  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 61

Cycle Length . . . 180 COS . . . . . 611  
 Offset . . . . . 59  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 8 2- 46 3- 14 4- 32  
           Phase 5- 9 6- 45 7- 8 8- 38  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .

-----  
 Pattern 62

Cycle Length . . . 180 COS . . . . . 622  
 Offset . . . . . 40  
 Vehicle Permissive . . [1] 0 [2] 0  
 Vehicle Perm 2 Displacement 0 Phase Reservice. . NO  
 Splits: Phase 1- 10 2- 59 3- 14 4- 17  
           Phase 5- 22 6- 47 7- 10 8- 21  
           Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0  
 Split Extension/Ring [1] 0 [2] 0  
 Split Demand Pattern [1] 0 [2] 0  
 XRT Pattern. . . 0  
     Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12  
 Coord Phases . . . X . . . X . . . . .  
 Veh Recall . . . . . . . . . . . . . . .  
 Veh Max Recall . . X . . . X . . . . . . . . .  
 Ped Recall . . . . . . . . . . . . . . .  
 Veh Omit . . . . . . . . . . . . . . .  
 Alt Sequence . . A: . B: . C: . D: . E: . F: .  
 -----



**Comparison of Travel Times**

**Peak: AM Peak**  
**Direction: WESTBOUND**

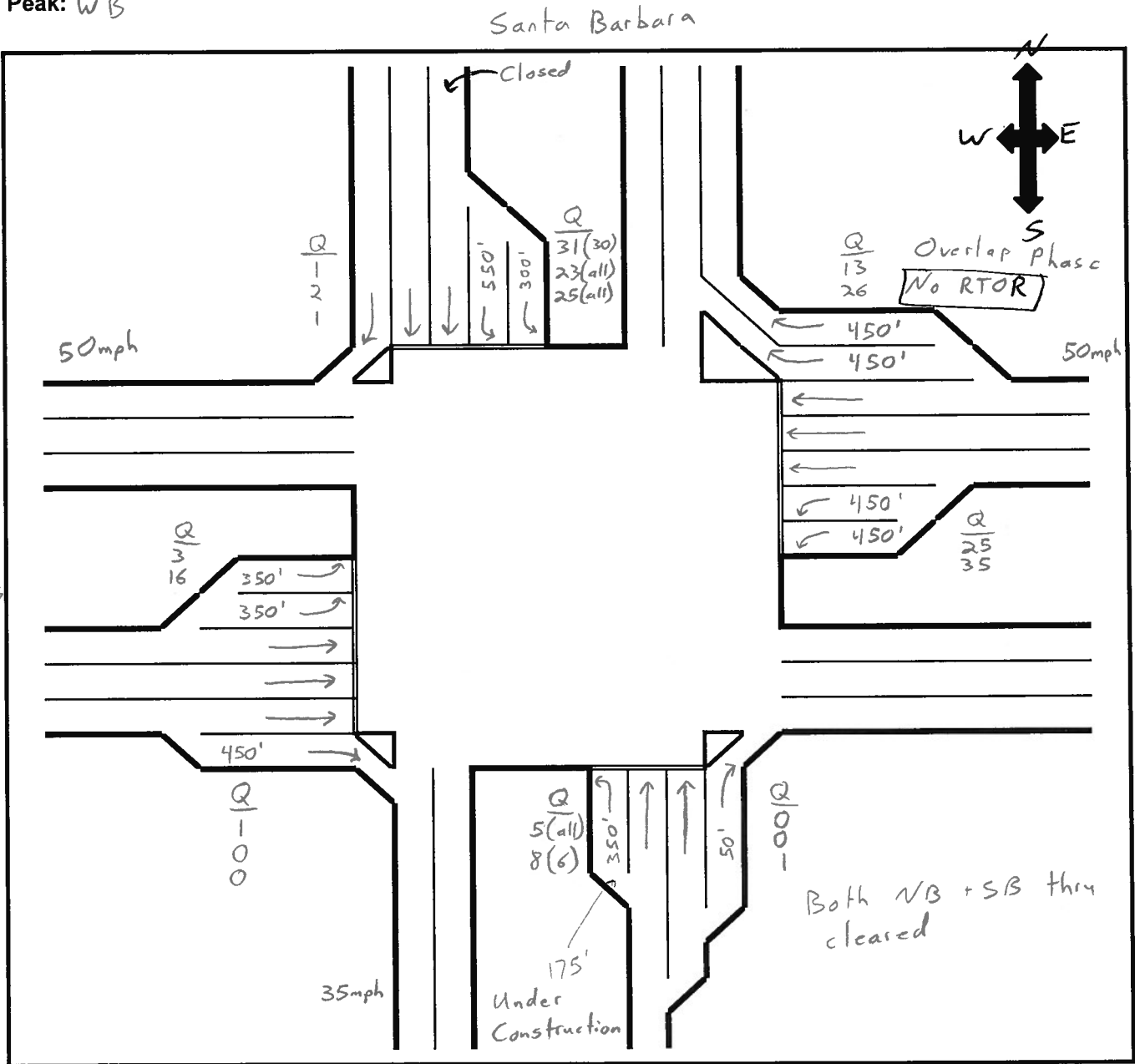
Distance (miles)	Veterans Memorial Parkway	Travel Times (Seconds)						Average Mean Speed (mph)
		Run 1	Run 2	Run 3	Run 4	Average	Standard Deviation	
0.70	Del Prado Boulevard to Country Club Boulevard	120	101	79	100	100.00	16.75	25.20
1.11	Country Club Boulevard to Santa Barbara Boulevard	145	83	120	119	116.75	25.51	34.23
1.06	Santa Barbara Boulevard to Skyline Boulevard	82	127	107	87	100.75	20.56	37.88
0.90	Skyline Boulevard to Chiquita Boulevard	60	71	65	64	65.00	4.55	49.85
<b>3.77</b>		<b>407</b>	<b>382</b>	<b>371</b>	<b>370</b>	<b>382.50</b>	<b>17.21</b>	<b>35.48</b>

**Peak: AM Peak**  
**Direction: EASTBOUND**

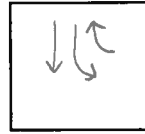
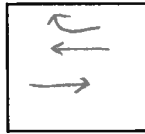
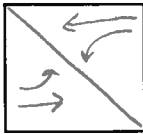
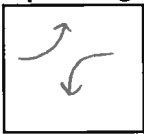
Distance (miles)	Veterans Memorial Parkway	Travel Times (Seconds)						Average Mean Speed (mph)
		Run 1	Run 2	Run 3	Run 4	Average	Standard Deviation	
0.90	Chiquita Boulevard to Skyline Boulevard	96	105	123	117	110.25	12.09	29.39
1.06	Skyline Boulevard to Santa Barbara Boulevard	73	176	123	223	148.75	64.95	25.65
1.11	Santa Barbara Boulevard to Country Club Boulevard	112	100	87	155	113.50	29.49	35.21
0.70	Country Club Boulevard to Del Prado Boulevard	56	60	53	56	56.25	2.87	44.80
<b>3.77</b>		<b>337</b>	<b>441</b>	<b>386</b>	<b>551</b>	<b>428.75</b>	<b>91.91</b>	<b>31.65</b>

# Intersection Inventory Sheet

Intersection: Veterans Memorial Pkwy at Santa Barbara Blvd  
 Observer: JA  
 Peak: WB



## Signal Operating Plan:




Trial	1	2	3	4	5	6	7
Trial 1:	34s	8s	60s	21s	14s	59s	
Trial 2:	29s	9s	71s	24s	10s	67s	
Trial 3:							

Cycle  
 196s  
 210s


4:00pm

**Site Information**

<b>Feature</b>	<b>1</b>
<b>Road Name</b>	SANTA BARBARA BLVD.
<b>Site</b>	126054
<b>Description</b>	SANTA BARBARA BLVD, AT SW 22 TERRACE, PTMS 2054, LCPR 54
<b>Section</b>	12000027
<b>Milepoint</b>	2.1
<b>AADT</b>	<b>22093</b>
<b>Site Type</b>	Telemetered
<b>Class Data</b>	No
<b>K Factor</b>	9.66
<b>D Factor</b>	50.97
<b>T Factor</b>	3.36
<b>TRAFFIC REPORTS</b> (provided in  format)	
<b>Lee County</b>	<a href="#">Annual Average Daily Traffic</a>
<b>SITE 126054</b>	<a href="#">Highest 200 Hours</a>
	<a href="#">Historical AADT Data</a>
	<a href="#">Hourly Continuous Counts</a>


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Site Information	
Feature	1
Road Name	COUNTRY CLUB BLVD.
Site	123043
Description	COUNTRY CLUB BLVD, S OF VETERANS BLVD CC
Section	12000029
Milepoint	1.4
AADT	<b>14100</b>
Site Type	Portable
Class Data	No
K Factor	10.14
D Factor	57.25
T Factor	2.74
<b>TRAFFIC REPORTS</b> (provided in  format)	
Lee County	<a href="#">Annual Average Daily Traffic</a>
SITE 123043	<a href="#">Historical AADT Data</a>
	No Synopsis Report Available

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Site Information	
<b>Feature</b>	<b>1</b>
<b>Road Name</b>	VETERANS PKWY
<b>Site</b>	126050
<b>Description</b>	VETERAN'S PKWY, W OF ACADEMY BLVD, PTMS 2050, LCPR 50
<b>Section</b>	12505000
<b>Milepoint</b>	0.054
<b>AADT</b>	<b>47264</b>
<b>Site Type</b>	Telemetered
<b>Class Data</b>	No
<b>K Factor</b>	9.79
<b>D Factor</b>	68.04
<b>T Factor</b>	3.36
<b>TRAFFIC REPORTS</b> (provided in  format)	
<b>Lee County</b>	<a href="#">Annual Average Daily Traffic</a>
<b>SITE 126050</b>	<a href="#">Highest 200 Hours</a>
	<a href="#">Historical AADT Data</a>
	<a href="#">Hourly Continuous Counts</a>

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**Site Information**

<b>Feature</b>	<b>1</b>
<b>Road Name</b>	SANTA BARBARA BLVD.
<b>Site</b>	126055
<b>Description</b>	SANTA BARBARA BLVD, S OF SW 28TH ST & VETERANS PKWY, PTMS 2055, LCPR 55
<b>Section</b>	12000027
<b>Milepoint</b>	1.342
<b>AADT</b>	<b>25092</b>
<b>Site Type</b>	Telemetered
<b>Class Data</b>	No
<b>K Factor</b>	9.56
<b>D Factor</b>	55.11
<b>T Factor</b>	5.49
<b>TRAFFIC REPORTS</b> (provided in  format)	
<b>Lee County</b>	<a href="#">Annual Average Daily Traffic</a>
<b>SITE 126055</b>	<a href="#">Highest 200 Hours</a>
	<a href="#">Historical AADT Data</a>
	<a href="#">Hourly Continuous Counts</a>

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***APPENDIX E  
EXISTING CORSIM RESULTS AND  
HCM EQUIVALENCY TABLES***

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**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**Existing AM Peak Hour Intersection Level of Service**

Intersection	Approach	CORSIM Nodes		Movement	PM PK VOLUME	CORSIM Run 1 Seed # 18,075		CORSIM Run 2 Seed # 4,126		CORSIM Run 3 Seed # 42		CORSIM Run 4 Seed # 5,672		CORSIM Run 5 Seed # 695		CORSIM Run 6 Seed # 5,907		CORSIM Run 7 Seed # 5,088		CORSIM Run 8 Seed # 8,784		CORSIM Run 9 Seed # 27,797		CORSIM Run 10 Seed # 20,943		AVERAGE			CORSIM /Count (0.90<x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)	
		A	B			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS				
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	275	289	88.5	286	93.5	272	94.0	258	82.6	295	114.5	285	93.1	241	74.5	278	81.8	251	80.9	267	82.4	272	88.6	F	1.00			
		906	910	Thru	1251	1241	39.4	1244	37.6	1257	40.7	1270	39.3	1225	38.8	1241	38.8	1296	42.2	1264	41.2	1278	40.3	1272	41.6	1259	40.0	D	1.01			
		906	910	Right	37	30	8.4	25	7.1	28	9.7	33	6.7	33	5.9	37	6.5	22	8.8	26	7.2	35	8.2	25	6.4	29	7.5	A	0.79	-0.17%	0.066	
				OVERALL	1563	1560	47.9	1555	47.4	1557	49.5	1561	45.8	1553	52.5	1563	47.9	1559	46.7	1568	47.9	1564	46.1	1564	46.1	1564	48.0	1560	48.0	D	1.00	
	Westbound	920	910	Left	373	362	89.4	400	90.5	373	92.8	362	90.0	392	92.1	392	90.5	343	91.0	387	93.4	383	89.8	379	93.2	377	91.3	F	1.01			
		920	910	Thru	596	602	7.1	567	8.1	574	6.2	546	5.6	572	7.8	545	6.0	602	8.5	534	6.0	579	6.8	572	6.7	569	6.9	A	0.96			
		920	910	Right	10	11	4.6	12	4.7	9	4.3	6	4.9	13	4.0	4	4.6	10	4.2	13	4.4	12	4.0	16	4.6	11	4.4	A	1.06			
				OVERALL	979	975	37.6	979	41.7	956	40.0	914	39.0	977	41.6	941	41.2	955	38.1	934	42.2	974	39.4	967	40.6	957	40.1	D	0.98	-2.23%	0.701	
	Northbound	911	910	Left	91	100	63.7	93	74.0	99	63.8	91	69.7	102	66.8	92	64.3	102	73.5	102	63.4	99	67.3	104	73.6	98	68.0	E	1.08			
		911	910	Thru	409	387	50.9	408	50.7	402	53.9	402	54.7	417	51.6	412	52.6	416	50.5	419	49.0	411	50.5	413	52.2	409	51.6	D	1.00			
		911	910	Right	386	400	24.1	384	21.9	385	20.6	394	21.7	368	20.7	383	20.0	370	22.0	361	25.3	375	22.5	365	19.6	379	21.8	C	0.98			
				OVERALL	886	887	40.2	885	40.6	886	40.5	887	41.6	887	40.5	887	39.7	888	41.3	882	40.9	885	40.5	882	41.2	886	40.7	D	1.00	-0.05%	0.013	
	Southbound	912	910	Left	385	368	67.6	375	78.0	379	72.7	366	70.5	392	76.4	377	70.6	392	71.7	404	75.7	399	76.9	393	75.0	385	73.5	E	1.00			
		912	910	Thru	385	397	44.6	386	42.5	376	43.9	397	43.7	370	42.2	386	48.8	381	41.8	382	47.3	363	43.5	388	45.9	383	44.4	D	0.99			
		912	910	Right	67	70	3.9	69	3.9	80	3.7	71	3.5	70	3.8	68	3.7	64	4.1	54	3.7	75	3.9	54	3.5	68	3.8	A	1.01			
				OVERALL	837	835	51.3	830	55.3	835	53.1	834	52.1	832	55.0	831	55.0	837	52.9	840	58.1	837	55.9	835	56.9	835	54.6	D	1.00	-0.29%	0.083	
<b>Intersection Total</b>					<b>4265</b>	<b>4257</b>	<b>44.6</b>	<b>4249</b>	<b>46.2</b>	<b>4234</b>	<b>46.2</b>	<b>4196</b>	<b>44.7</b>	<b>4249</b>	<b>48.0</b>	<b>4222</b>	<b>46.1</b>	<b>4239</b>	<b>44.9</b>	<b>4224</b>	<b>47.2</b>	<b>4260</b>	<b>45.3</b>	<b>4248</b>	<b>46.7</b>	<b>4238</b>	<b>46.0</b>	<b>D</b>	0.99			
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	208	205	87.3	240	108.4	222	86.4	221	95.6	212	101.3	196	85.4	225	115.1	223	122.5	199	162.3	236	93.3	218	105.8	F	1.05			
		930	940	Thru	1647	1610	80.5	1634	101.4	1631	86.3	1644	91.1	1634	96.1	1641	85.7	1603	120.6	1609	124.4	1627	168.8	1649	89.4	1628	104.4	F	0.99			
		930	940	Right	166	163	10.1	153	16.5	167	11.9	166	17.1	168	20.3	154	10.8	166	35.4	138	30.4	178	80.6	149	14.0	160	24.7	C	0.97			
				OVERALL	2021	1978	75.4	2027	95.8	2020	80.2	2031	85.5	2014	90.4	1991	79.8	1994	112.9	1970	117.6	2004	160.3	2034	84.3	2006	98.2	F	0.99	-0.73%	0.328	
	Westbound	945	940	Left	189	206	60.0	186	59.8	199	71.6	202	63.4	202	61.0	191	63.9	177	70.3	198	63.2	202	69.6	189	63.5	195	64.6	E	1.03			
		945	940	Thru	723	731	28.2	717	28.1	738	32.8	690	30.7	723	28.0	718	30.0	697	31.2	700	27.9	712	30.2	720	28.7	715	29.6	C	0.99			
		945	940	Right	109	115	13.9	86	17.6	111	18.7	75	18.2	110	17.9	99	17.5	116	17.3	104	14.7	102	16.4	102	18.2	102	17.0	B	0.94			
				OVERALL	1021	1052	32.8	989	33.1	1048	38.7	967	36.6	1035	33.4	1008	35.2	990	36.6	1002	33.5	1016	36.7	1011	34.1	1012	35.1	C	0.99	-0.90%	0.289	
	Northbound	941	940	Left	180	185	81.1	190	80.1	174	87.5	175	83.7	194	149.9	176	97.3	196	164.8	182	99.5	188	127.3	181	86.7	184	105.8	F	1.02			
		941	940	Thru	375	352	52.0	378	45.7	361	49.9	374	49.8	373	50.5	374	50.1	363	47.7	401	48.4	363	48.0	372	48.3	371	49.0	D	0.99			
		941	940	Right	612	585	211.9	596	75.5	632	65.1	586	126.8	600	92.6	615	77.5	610	61.2	582	63.0	603	65.3	615	102.3	602	94.1	F	0.98			
				OVERALL	1167	1122	140.2	1164	66.6	1167	63.7	1135	94.8	1167	88.6	1165	71.7	1169	74.4	1165	63.7	1154	69.9	1168	82.7	1158	81.6	F	0.99	-0.81%	0.276	
	Southbound	942	940	Left	587	599	61.6	588	61.7	584	59.3	574	59.2	579	61.3	569	62.6	568	62.0	559	60.0	577	59.8	581	61.7	578	60.9	E	0.98			
		942	940	Thru	434	430	38.2	436	35.8	455	37.2	473	36.3	461	35.3	467	37.1	456	35.3	484	37.7	453	33.8	450	36.1	457	36.3	D	1.05			
		942	940	Right	76	63	6.6	67	5.9	58	4.6	53	4.9	58	5.4	55	4.8	69	5.5	50	5.3	66	5.3	62	5.4	60	5.4	A	0.79			
				OVERALL	1097	1092	49.3	1091	47.9	1097	47.3	1100	46.7	1098	47.4	1091	48.8	1093	47.3	1093	47.6	1096	45.8	1093	48.0	1094	47.6	D	1.00	-0.24%	0.079	
<b>Intersection Total</b>					<b>5306</b>	<b>5244</b>	<b>75.3</b>	<b>5271</b>	<b>67.7</b>	<b>5332</b>	<b>61.7</b>	<b>5233</b>	<b>70.3</b>	<b>5314</b>	<b>70.0</b>	<b>5255</b>	<b>63.0</b>	<b>5246</b>	<b>76.2</b>	<b>5230</b>	<b>74.8</b>	<b>5270</b>	<b>92.9</b>	<b>5306</b>	<b>66.9</b>	<b>5270</b>	<b>71.9</b>	<b>E</b>	0.99			
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	172	188	99.9	218	107.0	211	102.0	212	103.6	193	113.1	173	112.1	199	107.7	190	103.5	172	109.3	204	107.7	196	106.6	F	1.14			
		960	970	Thru	2486	2462	56.5	2447	57.7	2476	61.6	2407	62.1	2408	56.2	2472	57.2	2405	57.7	2369	57.6	2446	59.4	2482	60.8	2437	58.7	E	0.98			
		960	970	Right	188	155	33.7	152	33.2	166	37.3	158	39.0	181	31.7	175	33.9	170	37.0	162	32.7	173	35.2	164	34.7	166	34.8	C	0.88			
				OVERALL	2846	2805	58.2	2817	60.2	2853	63.2	2777	63.9	2782	58.6	2820	59.1	2774	60.0	2721	59.3	2791	61.0	2850	62.6	2799	60.6	E	0.98	-1.65%	0.885	
	Westbound	980	970	Left	136	138	65.4	136	80.3	154	63.8	170	76.9	136	67.6	155	72.5	139	71.8	135	75.1	137	73.8	143	70.2	144	71.7	E	1.06			
		980	970	Thru	705	718	29.1	702	27.4	711	27.4	669	28.0	713	25.9	678	27.5	690	28.0	689	29.1	697	26.9	689	26.4							



## Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report Existing PM Peak Hour Intersection Level of Service

Intersection	Approach	CORSIM Nodes		Movement	PM PK VOLUME	CORSIM Run 1		CORSIM Run 2		CORSIM Run 3		CORSIM Run 4		CORSIM Run 5		CORSIM Run 6		CORSIM Run 7		CORSIM Run 8		CORSIM Run 9		CORSIM Run 10		AVERAGE			CORSIM /Count (0.90<x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Seed # 11,818	Delay (Sec/Veh)	Seed # 3,393	Delay (Sec/Veh)	Seed # 362	Delay (Sec/Veh)	Seed # 21,658	Delay (Sec/Veh)	Seed # 17,169	Delay (Sec/Veh)	Seed # 12,877	Delay (Sec/Veh)	Seed # 3,605	Delay (Sec/Veh)	Seed # 2,347	Delay (Sec/Veh)	Seed # 32,371	Delay (Sec/Veh)	Seed # 9,116	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
						Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	362	374	85.2	349	82.3	362	87.4	366	90.3	395	85.6	362	82.7	362	80.4	373	89.6	382	91.6	350	90.3	368	86.5	F	1.02		
		906	910	Thru	803	800	35.7	821	33.8	799	34.2	797	34.4	768	31.5	803	31.8	793	32.3	791	33.9	790	33.4	835	35.2	800	33.6	C	1.00		
		906	910	Right	64	51	5.9	58	7.8	60	8.8	60	5.2	65	7.7	63	6.7	72	8.7	65	7.5	59	7.6	45	6.6	60	7.3	A	0.93		
				OVERALL	1229	1225	49.6	1228	46.4	1221	48.7	1223	49.7	1228	47.6	1228	45.5	1227	45.1	1229	49.4	1231	50.2	1230	49.8	1227	48.2	D	1.00	-0.16%	0.057
	Westbound	920	910	Left	627	627	115.4	634	114.9	648	121.5	663	114.8	636	105.6	625	102.6	649	103.7	630	104.9	648	112.7	645	107.5	641	110.4	F	1.02		
		920	910	Thru	1415	1411	34.6	1398	34.5	1398	34.0	1445	36.3	1370	29.9	1385	31.2	1388	33.1	1406	34.7	1389	33.6	1395	34.4	1399	33.6	C	0.99		
		920	910	Right	10	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	A	0.00		
				OVERALL	2052	2038	59.4	2032	59.6	2046	61.7	2108	61.0	2006	53.9	2010	53.4	2037	55.6	2036	56.4	2037	58.8	2040	57.5	2039	57.7	E	0.99	-0.63%	0.287
	Northbound	911	910	Left	144	144	79.1	133	78.5	167	81.0	134	72.8	143	90.1	152	89.0	159	84.0	157	90.9	150	84.8	140	90.9	148	84.1	F	1.03		
		911	910	Thru	324	310	68.7	324	62.3	311	72.5	314	63.9	345	64.7	329	64.5	324	66.4	303	70.3	336	69.7	315	65.5	321	66.9	E	0.99		
		911	910	Right	287	297	12.7	299	16.3	275	13.9	307	14.8	266	14.2	272	12.9	272	14.2	288	13.8	268	12.4	298	14.3	284	14.0	B	0.99		
				OVERALL	755	751	48.5	756	47.0	753	53.0	755	45.5	754	51.7	753	50.8	755	51.3	748	52.9	754	52.4	753	50.0	753	50.3	D	1.00	-0.24%	0.066
	Southbound	912	910	Left	172	178	82.7	148	79.2	190	79.2	151	82.3	184	79.0	183	81.4	184	79.0	192	79.5	176	74.7	177	80.9	176	79.8	E	1.03		
		912	910	Thru	385	375	66.8	407	70.0	365	64.2	386	68.5	373	66.0	377	69.0	369	66.5	375	67.1	383	67.4	387	66.7	380	67.2	E	0.99		
		912	910	Right	49	52	8.8	52	9.9	51	6.2	62	7.5	48	5.2	43	8.1	49	8.0	36	7.0	42	9.3	43	8.1	48	7.8	A	0.98		
				OVERALL	606	605	66.5	607	67.1	606	64.1	599	65.7	605	65.1	603	68.4	602	65.6	603	67.5	601	65.5	607	66.7	604	66.2	E	1.00	-0.36%	0.089
<b>Intersection Total</b>					<b>4642</b>	<b>4619</b>	<b>56.0</b>	<b>4623</b>	<b>55.0</b>	<b>4626</b>	<b>57.2</b>	<b>4685</b>	<b>56.2</b>	<b>4593</b>	<b>53.4</b>	<b>4594</b>	<b>52.8</b>	<b>4621</b>	<b>53.4</b>	<b>4616</b>	<b>55.4</b>	<b>4623</b>	<b>56.3</b>	<b>4630</b>	<b>55.5</b>	<b>4623</b>	<b>55.1</b>	<b>E</b>	1.00		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	261	250	99.8	247	93.1	290	96.5	210	86.7	284	94.3	255	87.5	290	95.0	287	92.3	271	88.9	295	92.5	268	92.6	F	1.03		
		930	940	Thru	878	894	64.1	906	66.0	846	63.5	932	60.2	829	61.3	879	65.2	861	61.2	860	62.4	841	64.7	872	63.1	872	63.2	E	0.99		
		930	940	Right	123	122	12.5	114	12.8	126	12.9	113	12.6	110	12.3	110	12.2	109	14.1	119	12.0	113	11.5	127	12.8	116	12.6	B	0.95		
				OVERALL	1262	1266	66.2	1267	66.5	1262	66.0	1255	60.3	1223	64.5	1244	65.1	1260	64.9	1266	64.5	1225	65.1	1294	64.9	1256	64.8	E	1.00	-0.46%	0.163
	Westbound	945	940	Left	611	626	109.0	603	103.9	614	105.1	577	102.9	663	108.8	610	97.4	594	99.8	604	101.5	606	102.6	648	100.2	615	103.1	F	1.01		
		945	940	Thru	1622	1611	54.8	1607	55.8	1605	55.1	1629	54.2	1574	57.8	1547	56.3	1592	57.2	1589	58.0	1604	58.8	1570	57.2	1593	56.5	E	0.98		
		945	940	Right	327	276	32.0	293	28.8	307	31.1	301	32.8	309	32.6	289	33.3	292	31.8	285	29.1	300	34.3	314	29.9	297	31.6	C	0.91		
				OVERALL	2560	2513	65.8	2503	64.2	2526	64.4	2507	62.8	2546	68.1	2446	63.8	2478	64.4	2478	65.3	2510	66.5	2532	64.8	2504	65.0	E	0.98	-2.19%	1.115
	Northbound	941	940	Left	260	249	171.7	257	214.6	240	126.8	270	147.0	237	117.8	251	191.5	260	128.9	254	194.0	247	169.9	274	175.8	254	163.8	F	0.98		
		941	940	Thru	522	521	63.4	503	64.2	525	64.4	506	65.6	545	62.6	506	60.9	512	60.8	518	66.4	516	59.2	488	64.6	514	63.2	E	0.98		
		941	940	Right	272	275	45.5	276	42.5	288	48.3	276	56.9	268	47.7	296	41.9	284	50.5	278	49.7	275	46.5	279	48.6	280	47.8	D	1.03		
				OVERALL	1054	1045	84.5	1036	95.7	1053	74.2	1052	84.2	1050	71.3	1053	86.7	1056	74.8	1050	92.9	1038	82.2	1041	89.6	1047	83.6	F	0.99	-0.63%	0.204
	Southbound	942	940	Left	425	420	96.5	428	90.3	409	97.5	427	92.0	389	90.7	392	91.9	383	92.0	411	89.1	405	91.4	439	96.2	410	92.8	F	0.97		
		942	940	Thru	597	603	64.2	592	60.4	625	63.1	611	63.2	658	59.0	631	61.4	629	63.3	604	61.3	635	61.1	589	62.8	618	62.0	E	1.03		
		942	940	Right	171	157	11.9	165	16.8	152	13.3	150	17.5	135	11.5	166	12.0	176	16.9	174	16.7	143	12.9	157	16.4	158	14.6	B	0.92		
				OVERALL	1193	1180	68.7	1185	65.1	1186	68.6	1188	67.8	1182	64.0	1189	64.5	1188	65.7	1189	64.4	1183	65.6	1185	69.0	1186	66.4	E	0.99	-0.63%	0.217
<b>Intersection Total</b>					<b>6069</b>	<b>6004</b>	<b>69.7</b>	<b>5991</b>	<b>70.3</b>	<b>6027</b>	<b>67.3</b>	<b>6002</b>	<b>67.0</b>	<b>6001</b>	<b>67.1</b>	<b>5932</b>	<b>68.3</b>	<b>5982</b>	<b>66.6</b>	<b>5983</b>	<b>69.8</b>	<b>5956</b>	<b>68.8</b>	<b>6052</b>	<b>69.9</b>	<b>5993</b>	<b>68.5</b>	<b>E</b>	0.99		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	240	284	85.7	255	92.2	247	82.7	264	93.3	244	86.1	268	92.0	247	83.9	236	83.8	250	79.8	247	87.5	254	86.7	F	1.06		
		960	970	Thru	1259	1258	29.7	1305	27.6	1243	29.3	1322	29.1	1197	28.6	1250	29.9	1236	29.4	1242	32.1	1227	28.5	1289	27.5	1257	29.2	C	1.00		
		960	970	Right	76	65	8.9	71	14.6	60	8.5	60	14.2	52	10.9	59	8.9	48	9.5	73	12.6	61	13.4	65	9.9	61	11.1	B	0.81		
				OVERALL	1575	1607	38.7	1631	37.1	1550	37.0	1646	38.8	1493	37.4	1577	39.6	1531	37.6	1551	39.0	1538	36.2	1601	36.0	1573	37.8	D	1.00	-0.16%	0.063
	Westbound	980	970	Left	300	325	81.3	298	79.8	328	81.6	307	81.1	308	82.3	323	77.5	325	80.4	352	80.5	300	82.3	303	81.6	317	80.8	F	1.06		
		980	970	Thru	2200	2170	29.0	2191	31.2	2182	31.5	2199	30.1	2223	29.3	2136	31.1	2170	29.6	2151	29.5	2219	31.2	2182</							

**PM Peak Westbound**

Section	Veterans Memorial Parkway Section Description	Travel Time Survey				CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM	CORSIM
		Distance	Average Travel Time (Seconds)	Average Speed (MPH)	Maximum Speed (MPH)	Minimum Speed (MPH)	Run 1 Speed (MPH)	Run 2 Speed (MPH)	Run 3 Speed (MPH)	Run 4 Speed (MPH)	Run 5 Speed (MPH)	Run 6 Speed (MPH)	Run 7 Speed (MPH)	Run 8 Speed (MPH)	Run 9 Speed (MPH)	Run 10 Speed (MPH)	Average Speed (MPH)	
5	Del Prado Boulevard to Country Club Boulevard	0.70	100.00	25.2	31.9	21.0	28.7	28.2	27.7	28.4	28.5	28.4	28.4	28.2	28.0	28.5	28.3	
6	Country Club Boulevard to Santa Barbara Boulevard	1.11	116.75	34.2	48.1	27.6	24.6	24.6	24.5	24.9	24.2	24.9	24.9	24.5	24.6	24.7	24.6	
7	Santa Barbara Boulevard to Skyline Boulevard	1.06	100.75	37.9	46.5	30.0	24.0	24.0	23.3	23.4	24.8	24.9	24.6	24.3	24.0	24.1	24.2	
8	Skyline Boulevard to Chiquita Boulevard	0.90	65.00	49.8	54.0	45.6	41.9	42.3	42.2	41.8	42.5	42.1	42.1	41.9	42.4	42.2	42.1	
<b>Total</b>		<b>3.77</b>	<b>382.50</b>	<b>35.5</b>	<b>36.7</b>	<b>33.3</b>	<b>27.3</b>	<b>27.2</b>	<b>26.8</b>	<b>27.2</b>	<b>27.4</b>	<b>27.6</b>	<b>27.6</b>	<b>27.2</b>	<b>27.1</b>	<b>27.3</b>	<b>27.3</b>	

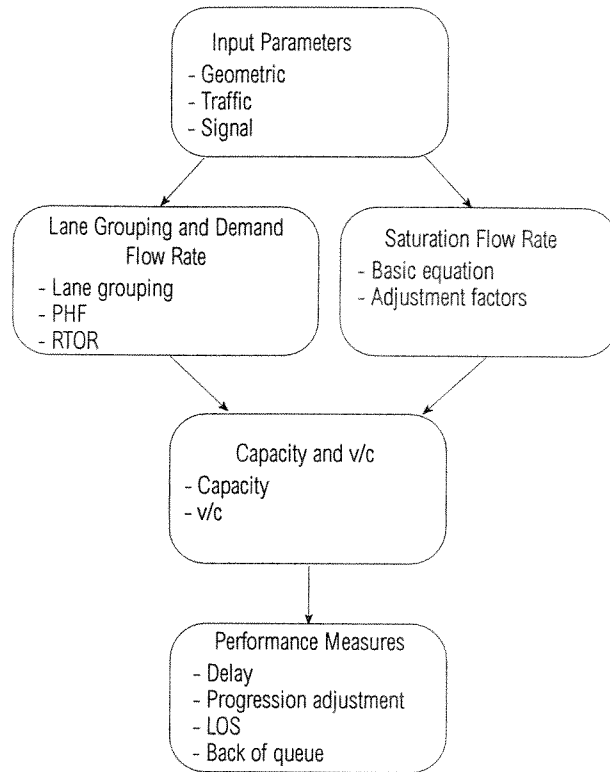
**PM Peak Eastbound**

1	Chiquita Boulevard to Skyline Boulevard	0.90	110.25	29.4	33.8	26.3	27.3	27.8	27.3	27.1	27.6	28.2	28.3	27.0	27.0	27.1	27.5
2	Skyline Boulevard to Santa Barbara Boulevard	1.06	148.75	25.7	52.3	17.1	25.0	24.7	24.9	25.9	25.2	25.2	24.9	25.1	24.9	25.3	25.1
3	Santa Barbara Boulevard to Country Club Boulevard	1.11	113.50	35.2	45.9	25.8	30.4	30.5	30.6	30.2	30.8	30.1	30.7	30.2	31.1	31.2	30.6
4	Country Club Boulevard to Del Prado Boulevard	0.70	56.25	44.8	47.5	42.0	43.2	43.0	42.4	42.7	43.0	42.5	43.3	42.6	43.3	43.6	43.0
<b>Total</b>		<b>3.77</b>	<b>428.75</b>	<b>31.7</b>	<b>40.3</b>	<b>24.6</b>	<b>30.0</b>	<b>30.1</b>	<b>29.9</b>	<b>30.2</b>	<b>30.3</b>	<b>30.1</b>	<b>30.3</b>	<b>29.8</b>	<b>30.2</b>	<b>30.3</b>	<b>30.1</b>



utilization, and left-turn treatment alternatives. It is important to note that some of these configurations may be considered unacceptable by some operating agencies from a traffic safety point of view. The safety aspect of signalized intersections cannot be ignored, and the provision in this chapter of a capacity and LOS analysis methodology for a specific operational configuration does not imply an endorsement of the suitability for application of such a configuration.

EXHIBIT 16-1. SIGNALIZED INTERSECTION METHODOLOGY



**LOS**

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

LOS criteria

EXHIBIT 23-2. LOS CRITERIA FOR BASIC FREEWAY SEGMENTS

Criteria	LOS				
	A	B	C	D	E
FFS = 75 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	75.0	74.8	70.6	62.2	53.3
Maximum v/c	0.34	0.56	0.76	0.90	1.00
Maximum service flow rate (pc/h/ln)	820	1350	1830	2170	2400
FFS = 70 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	70.0	70.0	68.2	61.5	53.3
Maximum v/c	0.32	0.53	0.74	0.90	1.00
Maximum service flow rate (pc/h/ln)	770	1260	1770	2150	2400
FFS = 65 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	65.0	65.0	64.6	59.7	52.2
Maximum v/c	0.30	0.50	0.71	0.89	1.00
Maximum service flow rate (pc/h/ln)	710	1170	1680	2090	2350
FFS = 60 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	60.0	60.0	60.0	57.6	51.1
Maximum v/c	0.29	0.47	0.68	0.88	1.00
Maximum service flow rate (pc/h/ln)	660	1080	1560	2020	2300
FFS = 55 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	55.0	55.0	55.0	54.7	50.0
Maximum v/c	0.27	0.44	0.64	0.85	1.00
Maximum service flow rate (pc/h/ln)	600	990	1430	1910	2250

Note:

The exact mathematical relationship between density and v/c has not always been maintained at LOS boundaries because of the use of rounded values. Density is the primary determinant of LOS. The speed criterion is the speed at maximum density for a given LOS.

The average of all passenger-car speeds measured in the field under low- to moderate-volume conditions can be used directly as the FFS of the freeway segment. This speed reflects the net effect of all conditions at the study site that influence speed, including those considered in this method (lane width, lateral clearance, interchange density, and number of lanes) as well as others such as speed limit and vertical and horizontal alignment. Speed data that include both passenger cars and heavy vehicles can be used for level terrain or moderate downgrades but should not be used for rolling or mountainous terrain.

If field measurement of FFS is not possible, FFS can be estimated indirectly on the basis of the physical characteristics of the freeway segment being studied. The physical characteristics include lane width, number of lanes, right-shoulder lateral clearance, and interchange density. Equation 23-1 is used to estimate the free-flow speed of a basic freeway segment:

$$FFS = BFFS - f_{LW} - f_{LC} - f_N - f_{ID} \tag{23-1}$$

where

- $FFS$  = free-flow speed (mi/h);
- $BFFS$  = base free-flow speed, 70 mi/h (urban) or 75 mi/h (rural);
- $f_{LW}$  = adjustment for lane width from Exhibit 23-4 (mi/h);
- $f_{LC}$  = adjustment for right-shoulder lateral clearance from Exhibit 23-5 (mi/h);

Estimate free-flow speed if measurement is not possible

***APPENDIX F***  
***GROWTH RATE TRAFFIC MEMORANDUM***

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## MEMORANDUM

**TO:** Sarah Clarke

**FROM:** Thirulokesh Krishnan, Naresh Kotari

**CC:** Nathan West, Dan Craig

**DATE:** July 7, 2010

**SUBJECT:** CN-10-03 Veteran's Parkway/ Santa Barbara Boulevard Overpass  
Proposed Traffic Forecasting Methodology

This memo documents the methodology that will be used for forecasting 2015 and 2035 Annual Average Daily Traffic (AADT) volumes for Veterans Memorial Parkway at Santa Barbara Boulevard Overpass Study. From this point forward Veterans Memorial Parkway at Santa Barbara Boulevard Overpass Study will be referred as Overpass Study. The study area includes the following segments and intersections:

### Segments:

- Veterans Memorial Parkway from Skyline Boulevard to Santa Barbara Boulevard
- Veterans Memorial Parkway from Santa Barbara Boulevard to Country Club Boulevard
- Santa Barbara Boulevard from SW 28<sup>th</sup> Street to Veterans Memorial Parkway
- Santa Barbara Boulevard from Veterans Memorial Parkway to SW 24<sup>th</sup> Street

### Intersections:

- Veterans Memorial Pkwy/ Skyline Blvd
- Veterans Memorial Pkwy/ Santa Barbara Blvd
- Veterans Memorial Pkwy/Country Club Blvd

### Data collection

As part of the data collection effort AADT volumes from the following sources were obtained (or) calculated:

- 2009 Florida Traffic Information (FTI) DVD

- 2009 Traffic Count Report, Lee County, Florida, February 2009
- 2030 Lee-Collier Cost Feasible Model files downloaded from Lee MPO website on June 15, 2010
- Bi-County Study: Burnt Store Road, Veterans Parkway and Colonial Boulevard, May 2005, Revised August 2005
- Lee County 2007 Validation Model downloaded from Traf-O-Data Corporation website on June 10, 2010

### **Forecasting Methodology**

The data obtained from various sources identified in the data collection section were used for developing AADT volumes for the existing year (2010), opening year (2015) and design year (2035) using the following methods:

- 2009 FTI DVD AADTs – Linear and exponential projections of AADTs using historical AADTs from 2008 to 2009.
- 2009 Traffic Count Report, Lee County, Florida, February 2009 – Linear and exponential projections of AADTs using historical AADTs from 2004 to 2009.
- Bi-County Study – Burnt Store Road, Veterans Parkway and Colonial Boulevard, May 2005, Revised August 2005 – Linear and exponential projections of AADTs using 2004 and 2030 AADTs
- Determination of simple growth rate using 2009 AADTs from 2009 FTI DVD and 2030 Bi-County Study AADTs
- Determination of simple growth rate using 2009 AADTs from 2009 FTI DVD and 2030 Lee-Collier County Cost Feasible Model AADTs

#### ***2009 FTI DVD AADTs – Linear and exponential projections of AADTs using historical AADTs from 2008 to 2009:***

Only two years of historical AADT volumes were available in 2009 FTI DVD. The available historical AADT volumes were used to project the AADTs for future conditions both linearly and exponentially. The projections show negative growth at some locations. Assuming that this pattern of negative growth will not be applicable for longer planning horizons, this methodology is determined as not a suitable technique to project traffic volumes for future years. Since, the projections show negative growth, an annual growth rate estimate was not calculated. **Table 1**



presents the historic AADTs from 2009 FTI DVD, calculated linear and exponential projections and the nature of growth at each study location.

***2009 Traffic Count Report, Lee County, Florida, February 2009 – Linear and exponential projections of AADTs using historical AADTs from 2004 to 2009:***

Five years of historical AADTs from the year 2004 to 2009 were obtained from 2009 Traffic Count Report, Lee County, Florida; for the study area and were projected both linearly and exponentially to obtain future AADT volumes. The projections show negative growth at most of the locations. Assuming that this pattern of negative growth will not be applicable for longer planning horizons, this methodology is determined as not a suitable technique to project traffic volumes for future years. Since, the projections show negative growth, annual growth rate estimate was not calculated. **Table 2** presents the historic AADTs from 2009 Traffic Count Report, calculated linear and exponential projections and the nature of growth at each study location.

***Bi-County Study – Burnt Store Road, Veterans Parkway and Colonial Boulevard, May 2005, Revised August 2005 – Linear and exponential projections of AADTs using 2004 and 2030 AADTs:***

AADTs for the years 2004 and 2030 were obtained from the Bi-County study and were projected both linearly and exponentially. The projections show positive growths at all the locations. The annual growth rate is calculated as 2.0% using the Bi-County Study AADT volumes. **Table 3** presents the historic AADTs from Bi-County Study, calculated linear and exponential projections and the nature of growth at each study location. However, this study was completed in 2005 using 2004 AADTs and 2030 Model volumes derived from 2025 Lee County Cost Affordable model.

***Determination of simple growth rate using 2009 AADTs from 2009 FTI DVD and 2030 Bi-County Study AADTs:***

Simple average growth rates were determined using the 2009 AADTs from 2009 FTI DVD and 2030 Bi-County Study AADTs only along Veterans Memorial Parkway and also for the Study area. The average growth along Veterans Memorial Parkway is 1.4% and the average growth inclusive of intersecting roadways in the study area is 1.6%. **Table 4** presents the AADTs and the growth rates.

***Determination of simple growth rate using 2009 AADTs from 2009 FTI DVD and 2030 Lee-Collier County Cost Feasible Model AADTs:***

Simple average growth rates were determined using the 2009 AADTs from 2009 FTI DVD and 2030 Lee-Collier Cost Feasible Model only along Veterans Memorial Parkway and also inclusive of intersecting roadways within the Study area. The average growth along Veterans Memorial Parkway is 2.0% and the average growth inclusive of intersecting roadways is 2.1%.

**Table 5** presents the AADTs and growth rates.

**Conclusion**

Growth rates using historical AADT volumes cannot be used for future AADT projections as the recent traffic trends shows a drop in AADTs. This eliminates the first two methodologies identified for AADT projections. Traffic projections from Bi-County study show a positive growth. However, considering the fact that the study was completed in 2005 using 2004 AADTs and 2025 Lee County Cost Feasible Model, it is recommended not to use the AADT projections based only on the Bi-County report.

The final two methods use 2009 AADTs from 2009 FTI DVD as the base year and 2030 AADTs from Bi-County Study and 2030 Lee-Collier County Cost Feasible Model to calculate growth rates. The average growth rate only on Veterans Memorial Parkway is 1.4% when 2030 Bi-County Study AADT volumes were used and 2.0% when 2030 Lee-Collier County Cost Feasible Model AADT volumes were used. It is recommended to use an average growth of 2.0% that is derived from 2030 Lee-Collier County Cost Feasible Model as the Model shows enough growth on the identified study segments when compared to 2009 AADTs.

**TABLE 1: FDOT 2009 TRAFFIC COUNTS FROM 2009 FTI DVD**

Roadway	Location	2004	2005	2006	2007	2008	2009	LINEAR					EXPONENTIAL					
								2010	2015	2030	2035	Projection	2010	2015	2030	2035	Projection	
Veterans Pkwy	West of Skyline Blvd																	
	East of Skyline Blvd					39,000	39,000	39,000	39,000	39,000	39,000		39,000	39,000	39,000	39,000		
	East of Santa Barbara Blvd					47,945	47,264	46,583	43,178	32,963	29,558	-	46,593	43,376	34,999	32,583	-	
	East of Country Club Blvd					54,500	53,500	52,500	47,500	32,500	27,500	-	52,518	47,874	36,262	33,055	-	
Skyline Blvd	South of Veterans Pkwy																	
	North of Veterans Pkwy																	
Santa Barbara Blvd	South of Veterans Pkwy					24,737	25,092	25,447	27,222	32,547	34,322	+	25,452	27,332	33,845	36,344	+	
	North of Veterans Pkwy					25,904	22,093	18,282	-773	-57,938	-76,993	-	18,843	8,503	781	353	-	
Country Club Blvd	South of Veterans Pkwy					14,300	14,100	13,900	12,900	9,900	8,900	-	13,903	12,957	10,490	9,776	-	
	North of Veterans Pkwy																	

**TABLE 2: LEE COUNTY 2009 TRAFFIC COUNTS**

Roadway	Location	2004	2005	2006	2007	2008	2009	LINEAR					EXPONENTIAL					
								2010	2015	2030	2035	Projection	2010	2015	2030	2035	Projection	
Veterans Pkwy	West of Skyline Blvd	23,900	25,700	27,500	29,500	28,200	26,800	28,410	29,860	34,210	35,660	+	28,424	30,016	35,345	37,324	+	
	East of Skyline Blvd	32,500	35,300	40,200	40,000	36,800	38,400	38,980	40,380	44,580	45,980	+	39,018	40,610	45,787	47,655	+	
	East of Santa Barbara Blvd	48,000	50,700	53,100	49,600	47,200	46,900	45,450	38,700	18,450	11,700	-	45,550	39,727	26,354	22,985	-	
	East of Country Club Blvd	50,800	51,400	58,200	57,400	49,800	50,800	50,640	45,840	31,440	26,640	-	50,607	46,266	35,353	32,321	-	
Skyline Blvd	South of Veterans Pkwy																	
	North of Veterans Pkwy																	
Santa Barbara Blvd	S OF SW 22 TERR	27,300	29,500	25,100	27,700	26,500	21,700	21,840	14,740	-6,560	-13,660	-	21,948	16,589	7,163	5,414	-	
	S OF SW 28 ST	26,200	23,000	27,900	27,700	25,800		28,970	33,070	45,370	49,470	+	29,285	34,668	57,511	68,081	+	
Country Club Blvd	South of Veterans Pkwy																	
	North of Veterans Pkwy																	

**TABLE 3: BI-COUNTY STUDY - BURNT STORE RD/VETERANS PKWY/COLONIAL BLVD, Prepared May 2005 (Revised August 2005)**

Roadway	Location	2004	2005	2006	2007	2008	2009	LINEAR					EXPONENTIAL					
								2010	2015	2030	2035	Projection	2010	2015	2030	2035	Projection	
Veterans Pkwy	West of Skyline Blvd	20,400						24,000	27,000	36,000	39,000	+	23,257	25,941	36,000	40,155	+	
	East of Skyline Blvd	30,000						35,077	39,308	52,000	56,231	+	34,060	37,861	52,000	57,802	+	
	East of Santa Barbara Blvd	51,600						53,538	55,154	60,000	61,615	+	53,428	55,000	60,000	61,766	+	
	East of Country Club Blvd	54,700						57,769	60,327	68,000	70,558	+	57,517	59,976	68,000	70,907	+	
Skyline Blvd	South of Veterans Pkwy	13,300						15,769	17,827	24,000	26,058	+	15,241	17,073	24,000	26,885	+	
	North of Veterans Pkwy	9,800						11,462	12,846	17,000	18,385	+	11,128	12,372	17,000	18,900	+	
Santa Barbara Blvd	South of Veterans Pkwy	24,100						26,154	27,865	33,000	34,712	+	25,913	27,527	33,000	35,056	+	
	North of Veterans Pkwy	25,000						27,077	28,808	34,000	35,731	+	26,838	28,473	34,000	36,071	+	
Country Club Blvd	South of Veterans Pkwy	15,200						15,846	16,385	18,000	18,538	+	15,805	16,327	18,000	18,595	+	
	North of Veterans Pkwy	15,500						18,846	21,635	30,000	32,788	+	18,052	20,496	30,000	34,062	+	

**TABLE 4: GROWTH RATES USING 2009 AADTs FROM FTI & 2030 BI-COUNTY STUDY**

Roadway	Location	2009 FTI: FDOT	2030 Bi-County Study	
		AADT	AADT	Growth Rate
Veterans Pkwy	West of Skyline Blvd		36,000	
	East of Skyline Blvd	39,000	52,000	1.6
	East of Santa Barbara Blvd	47,264	60,000	1.3
	East of Country Club Blvd	53,500	68,000	1.3
Skyline Blvd	South of Veterans Pkwy		24,000	
	North of Veterans Pkwy		17,000	
Santa Barbara Blvd	South of Veterans Pkwy	25,092	33,000	1.5
	North of Veterans Pkwy	22,093	34,000	2.6
Country Club Blvd	South of Veterans Pkwy	14,100	18,000	1.3
	North of Veterans Pkwy		30,000	
<b>Average Growth (Veterans Pkwy Only)</b>				<b>1.4</b>
<b>Average Growth (All Segments)</b>				<b>1.6</b>

Permanent Count Stations

**TABLE 5: GROWTH RATES USING 2009 AADTs FROM FTI & 2030 LEE-COLLIER COUNTY COST AFFORDABLE MODEL**

Roadway	Location	2009 FTI: FDOT	2030 Model*	
		AADT	AADT	Growth Rate
Veterans Pkwy	West of Skyline Blvd		55,000	0.0
	East of Skyline Blvd	39,000	60,900	2.7
	East of Santa Barbara Blvd	47,264	67,200	2.0
	East of Country Club Blvd	53,500	67,000	1.2
Skyline Blvd	South of Veterans Pkwy		21,000	0.0
	North of Veterans Pkwy		19,000	0.0
Santa Barbara Blvd	South of Veterans Pkwy	25,092	37,600	2.4
	North of Veterans Pkwy	22,093	31,000	1.9
Country Club Blvd	South of Veterans Pkwy	14,100	21,500	2.5
	North of Veterans Pkwy		30,300	0.0
<b>Average Growth (Veterans Pkwy Only)</b>		<b>0</b>	<b>0</b>	<b>2.0</b>
<b>Average Growth (All Segments)</b>		<b>0</b>	<b>0</b>	<b>2.1</b>

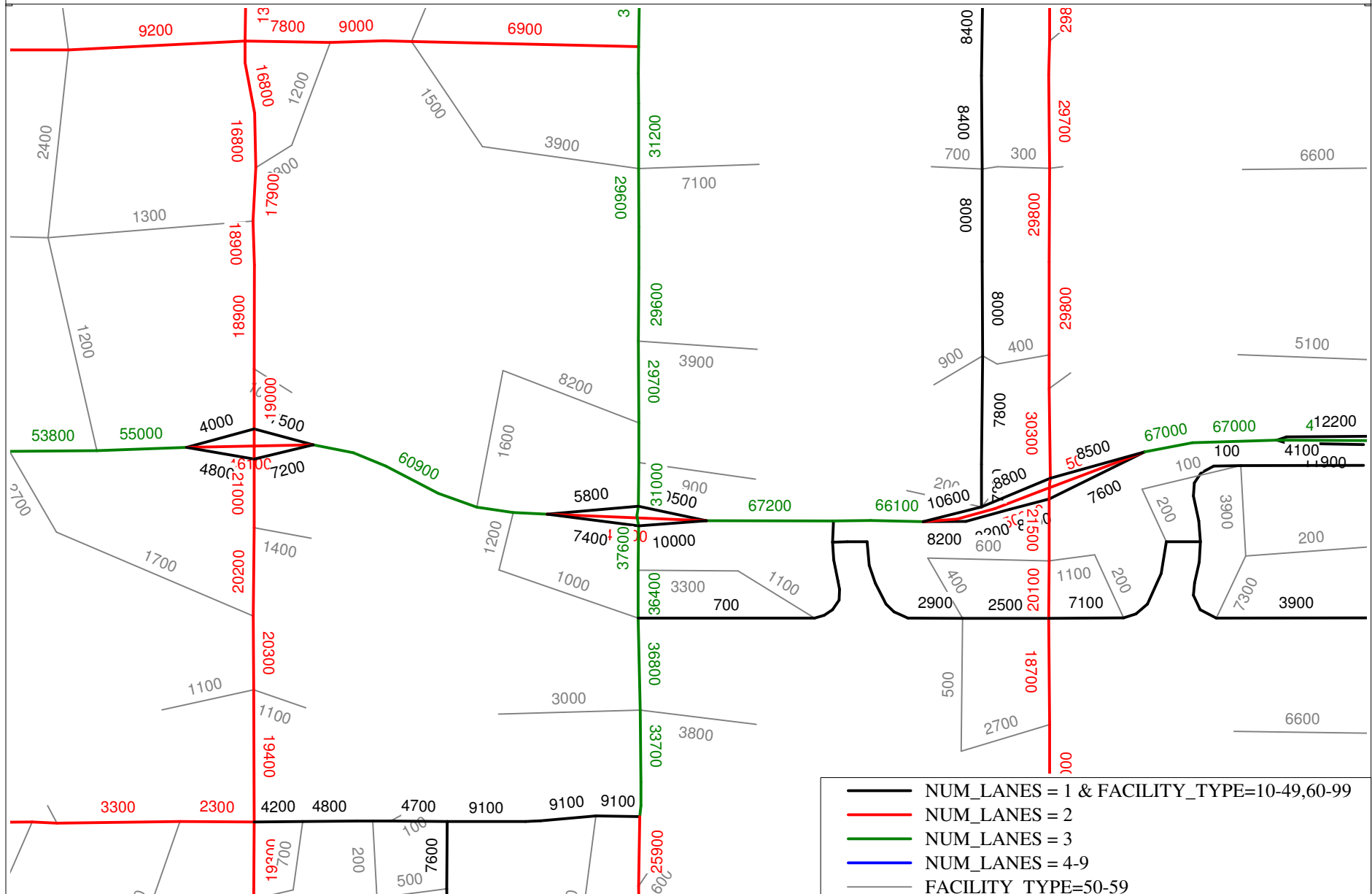
Notes: 2030 Model\* - Lee County 2030 Cost Affordable Model with Queue Jumps on Veterans Pkwy @ Skyline Blvd, Santa Barbara Blvd and Country Club Blvd

Permanent Count Stations

***APPENDIX G***  
***FDOT TURNS5A OUTPUTS***

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## Veterans Parkway & Santa Barbara Boulevard Q-Jump 2030 Cost Feasible Model



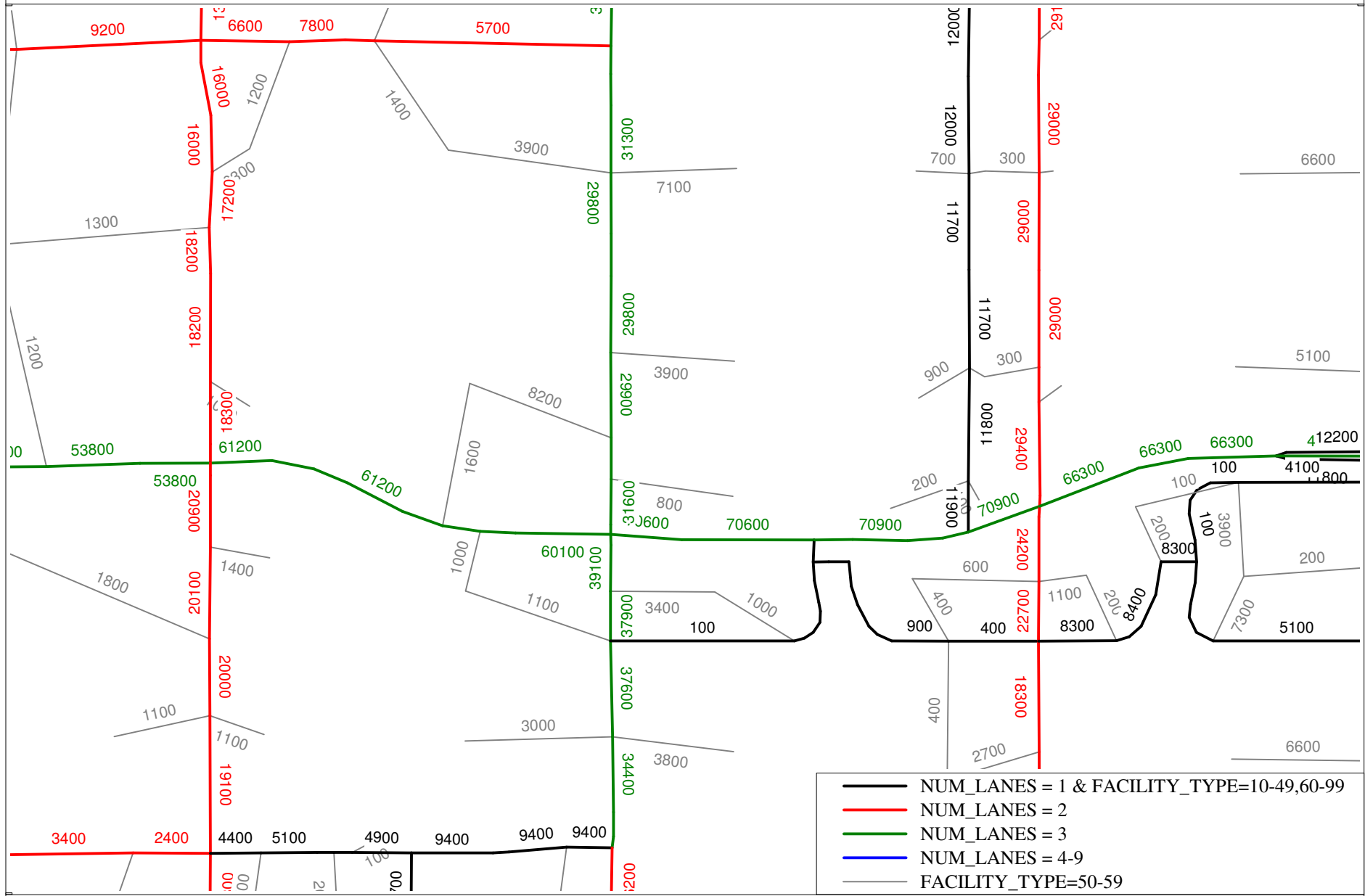
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## Veterans Parkway & Santa Barbara Boulevard Q-Jump 2030 No-Build Model



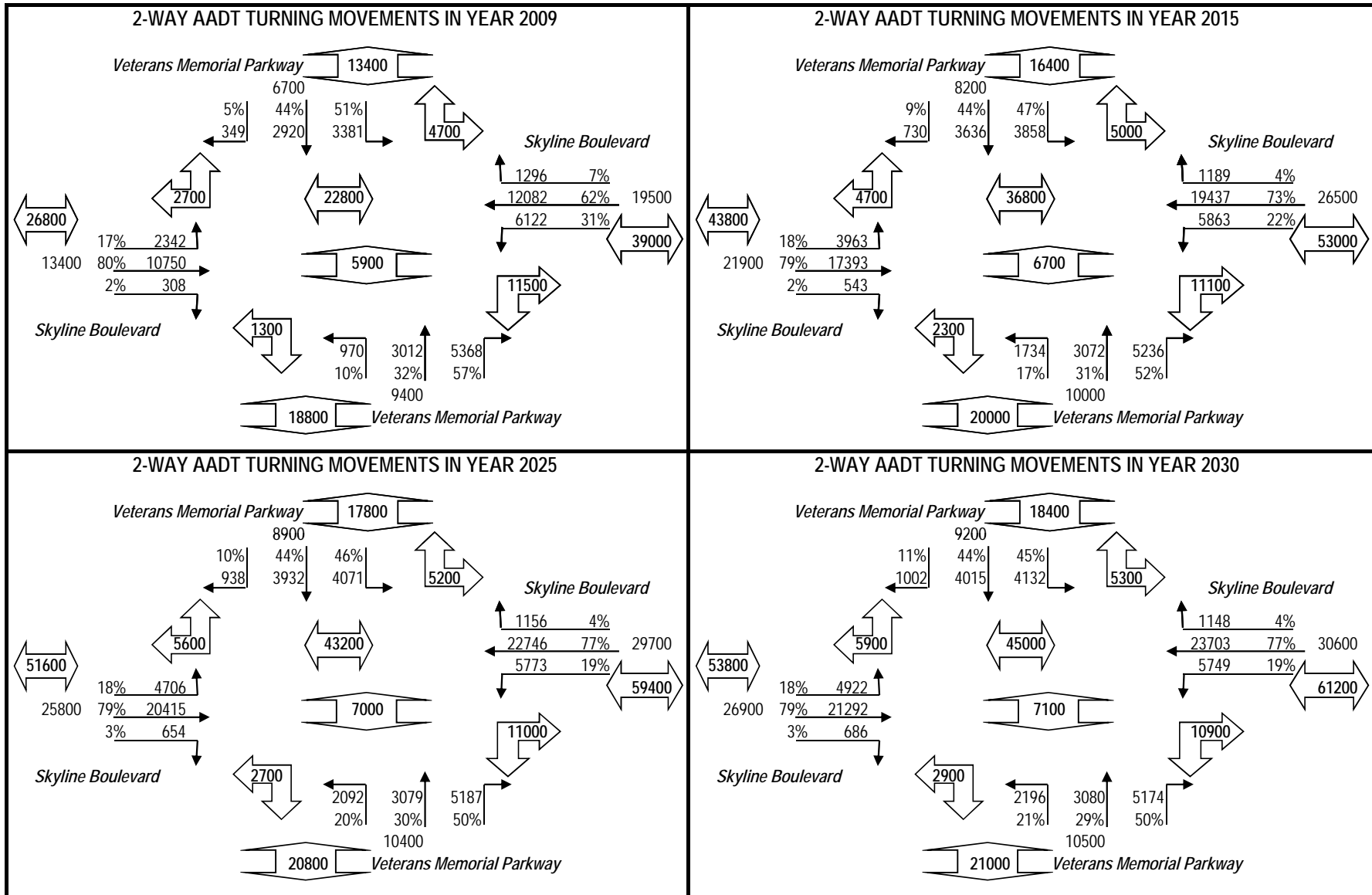
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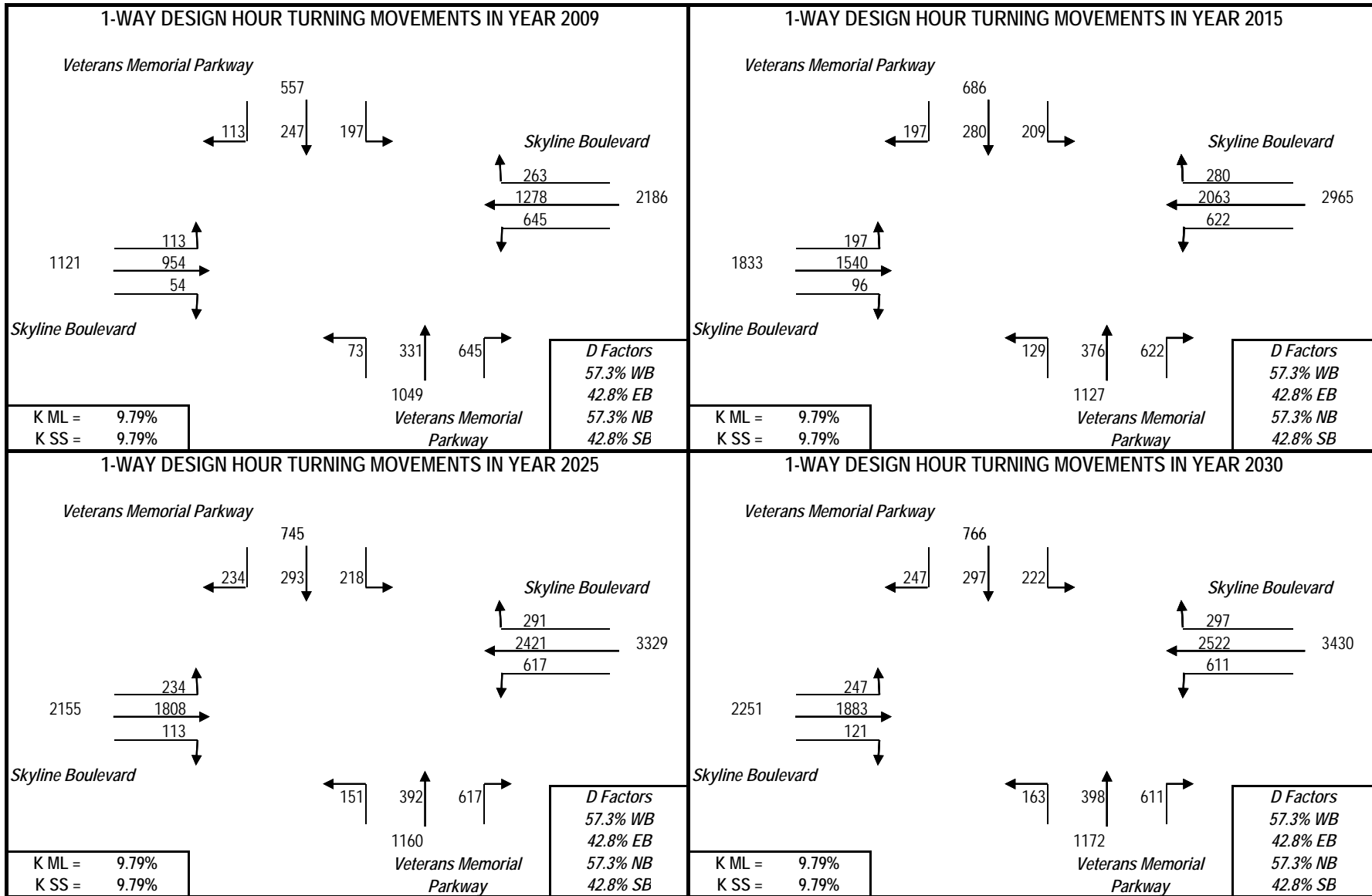
Licensed to Post, Buckley, Schuh & Jernigan, Inc.

## PROJECT TRAFFIC FOR Skyline Boulevard AT Veterans Memorial Parkway: TO

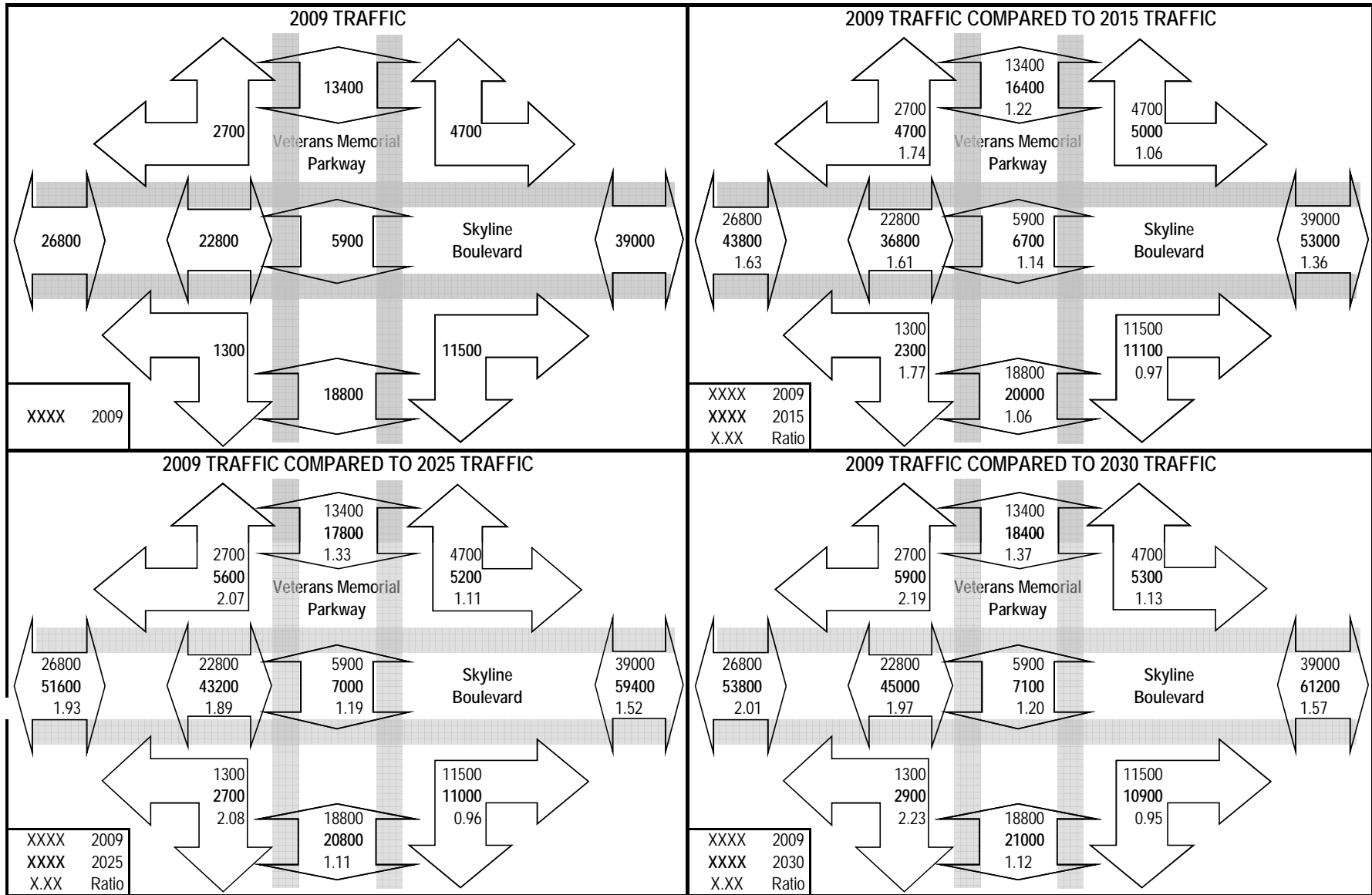




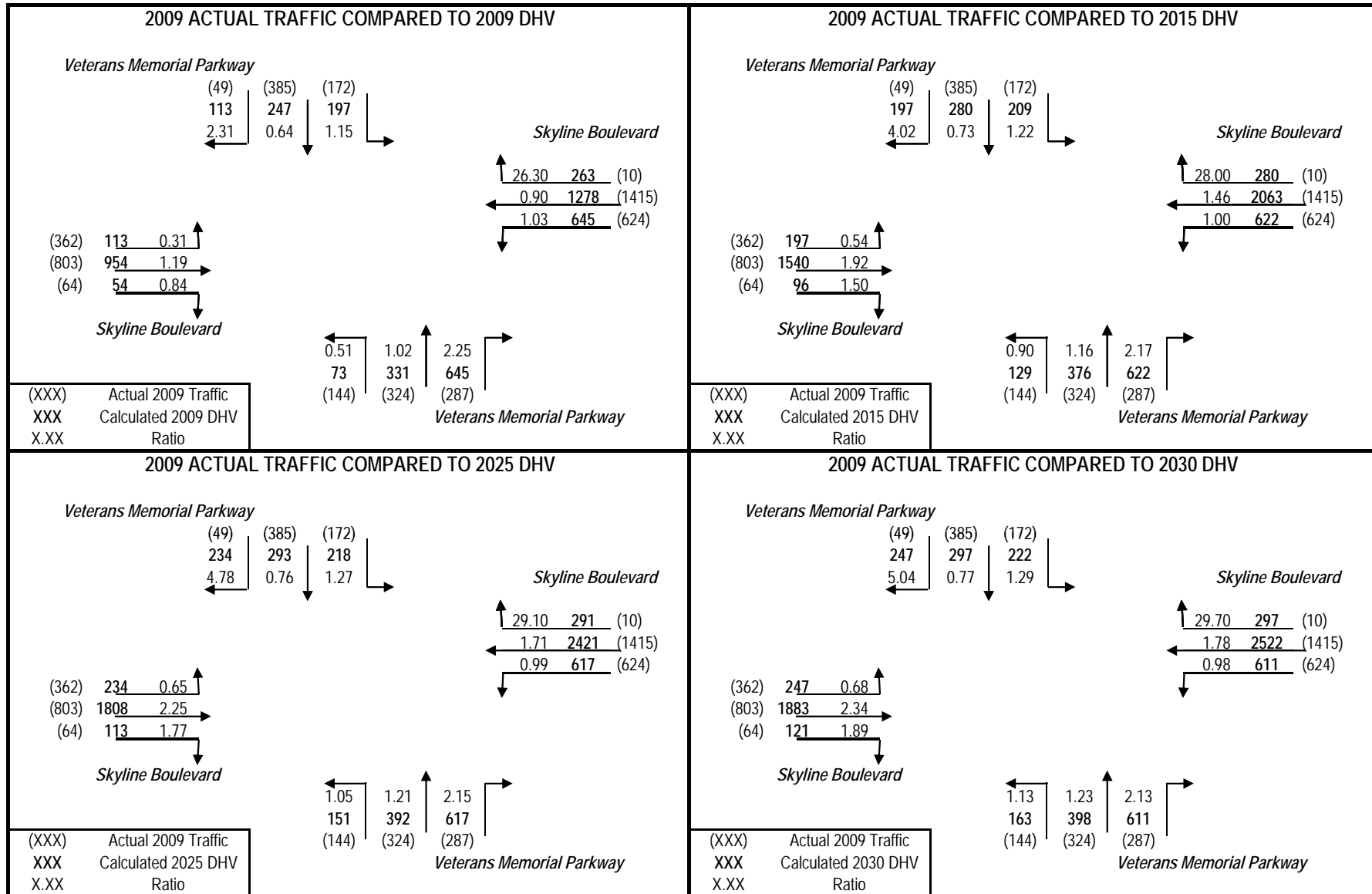
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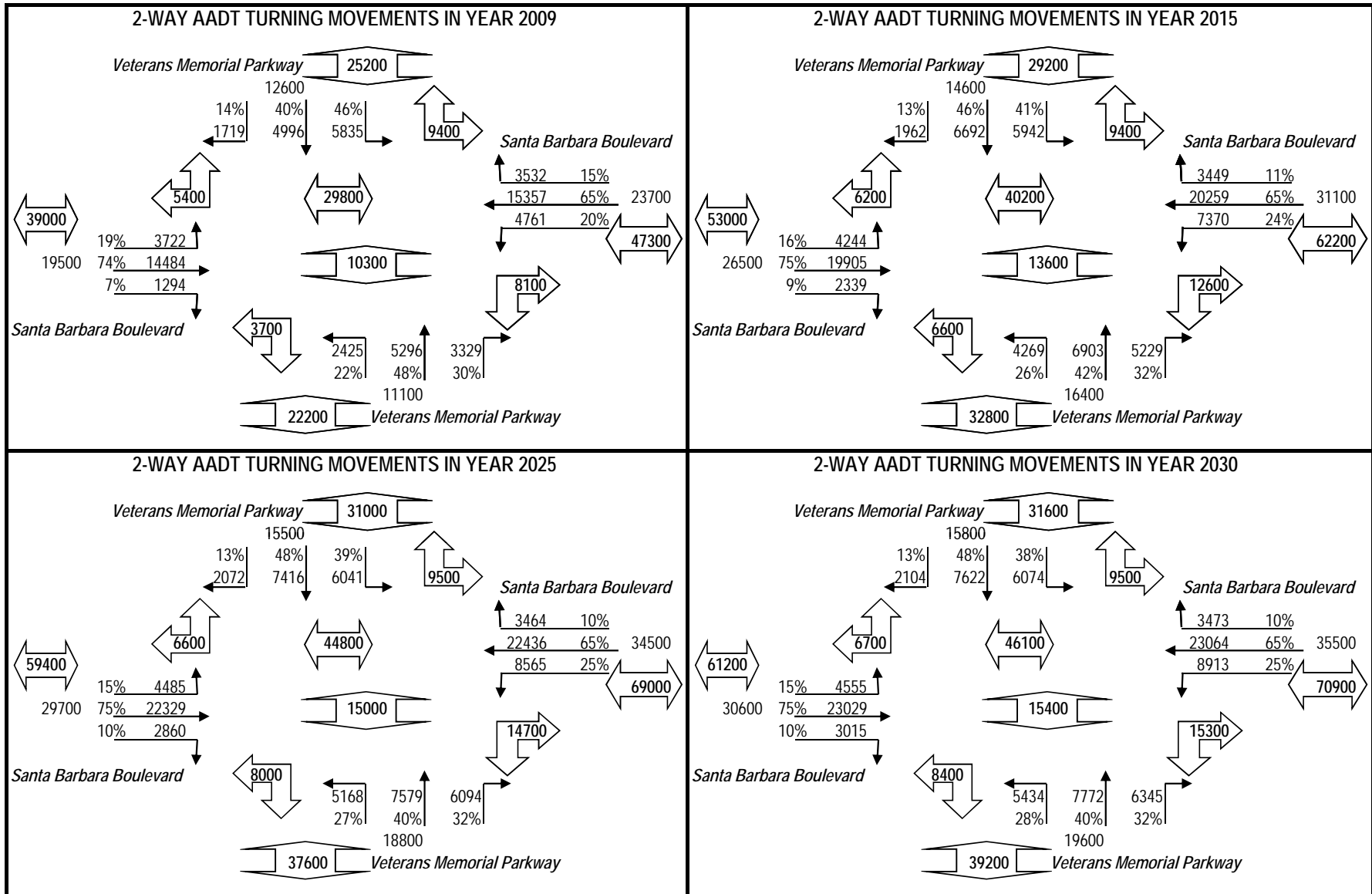
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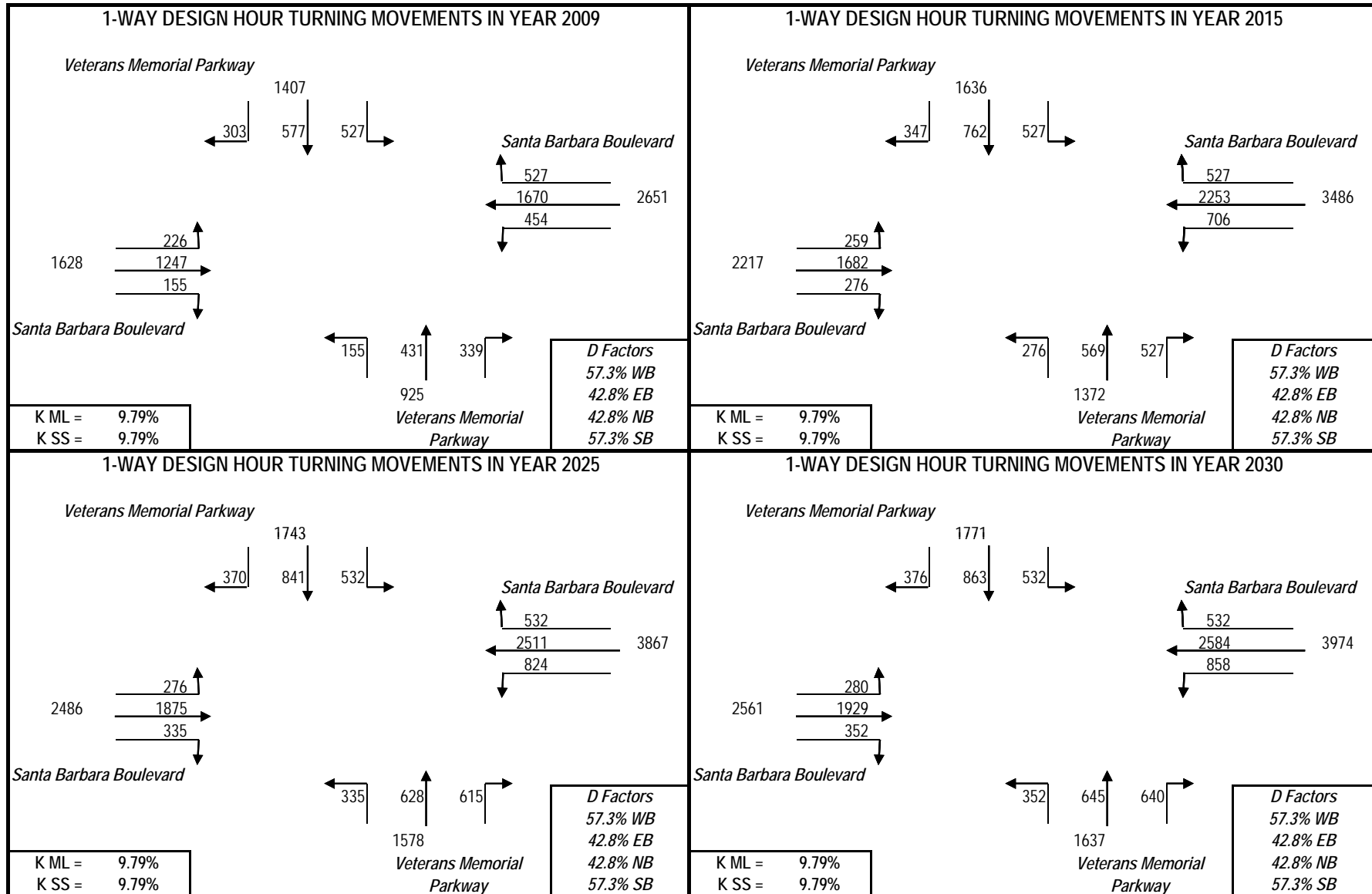
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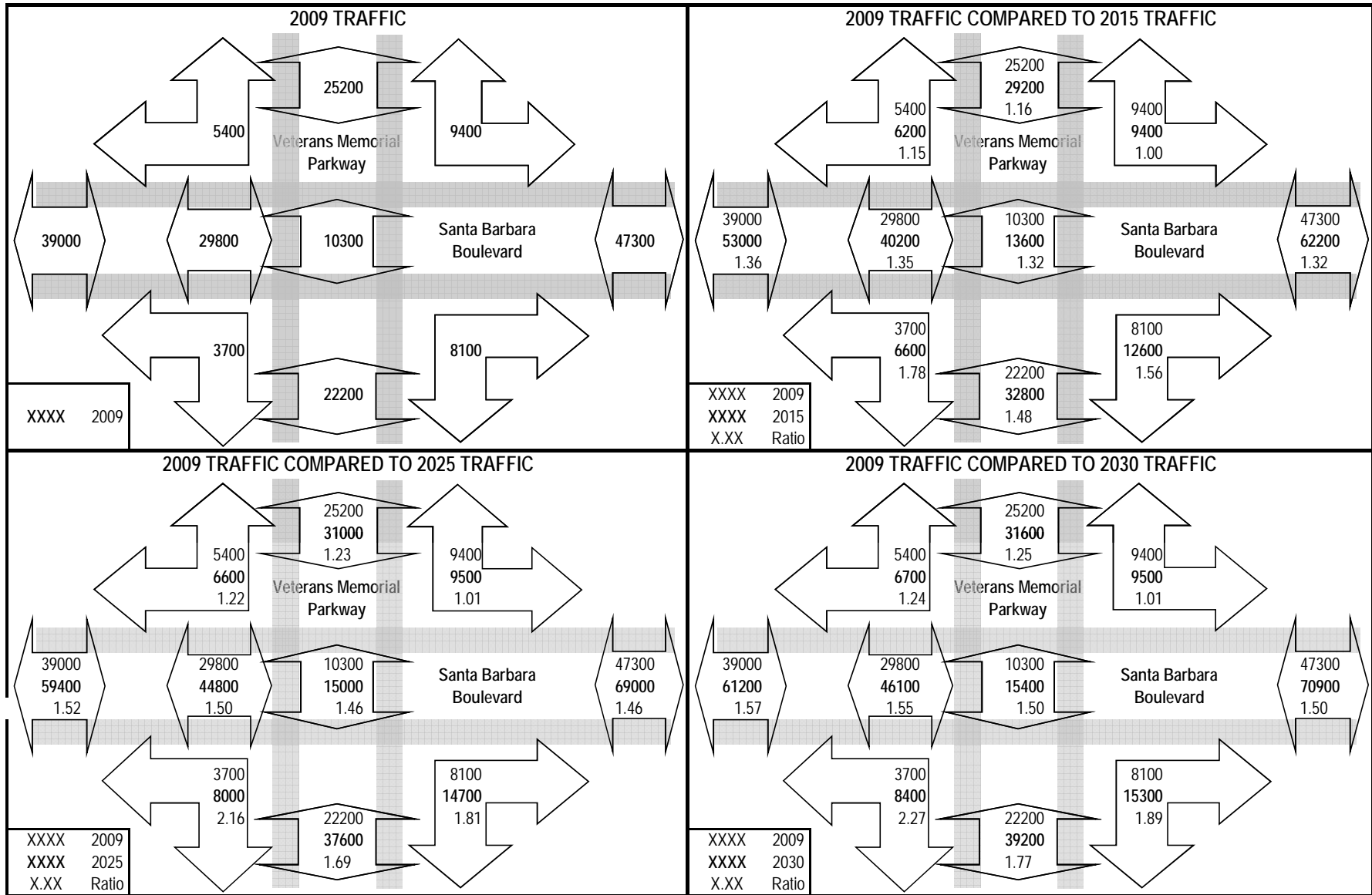
# PROJECT TRAFFIC FOR Santa Barbara Boulevard AT Veterans Memorial Parkway: TO



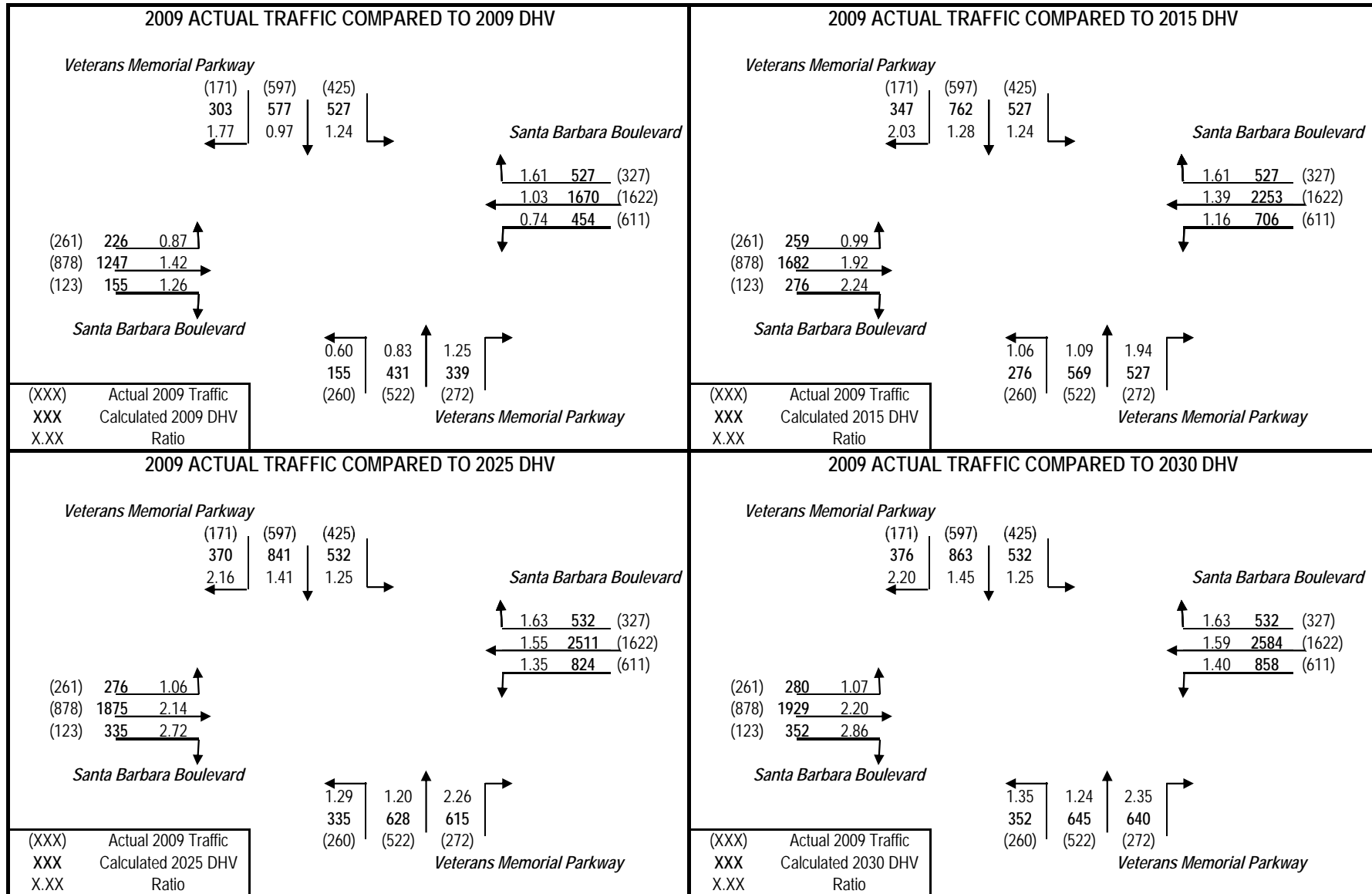
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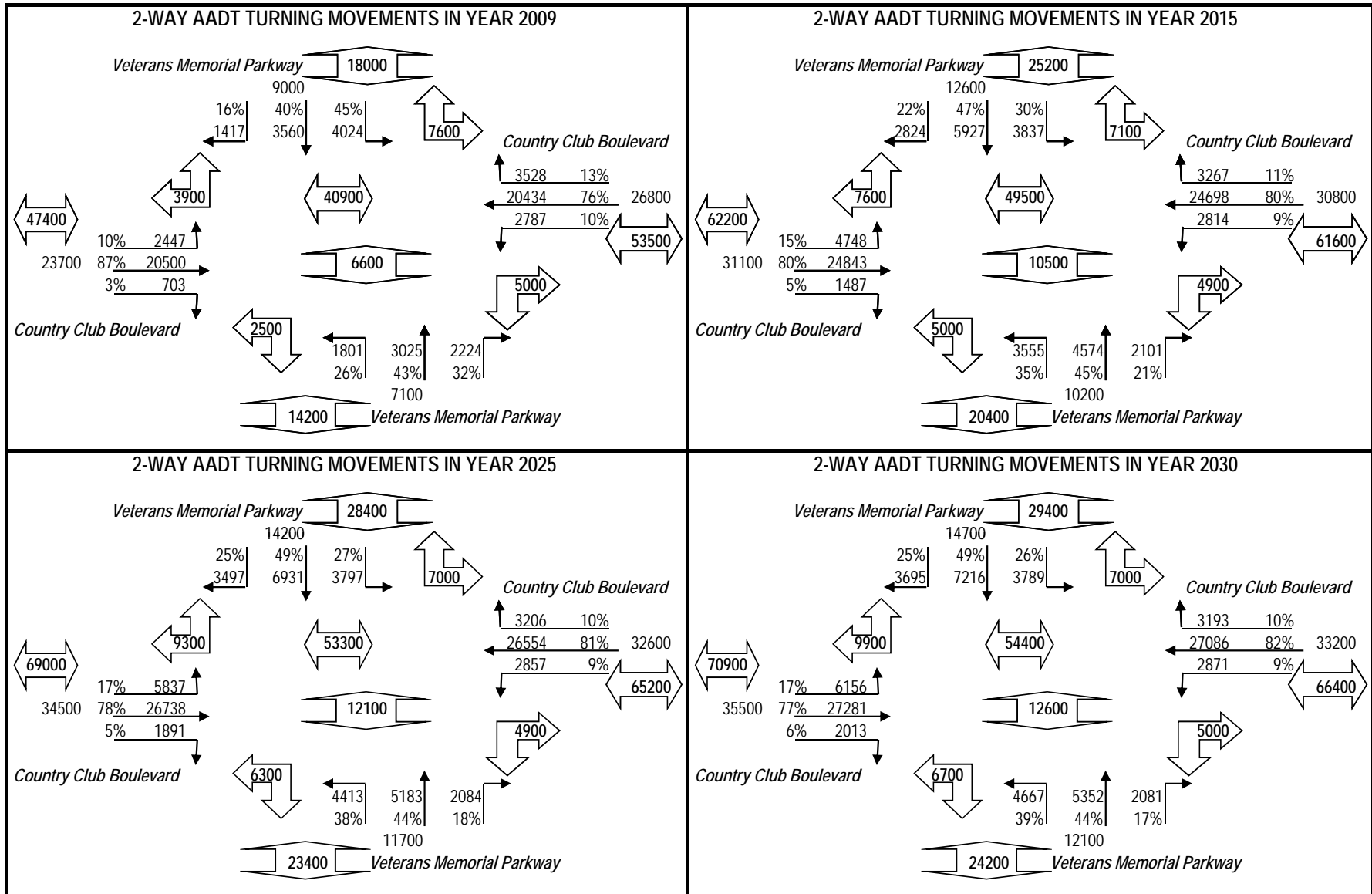
# PROJECT TRAFFIC FOR Santa Barbara Boulevard AT Veterans Memorial Parkway: TO



# PROJECT TRAFFIC FOR Santa Barbara Boulevard AT Veterans Memorial Parkway: TO

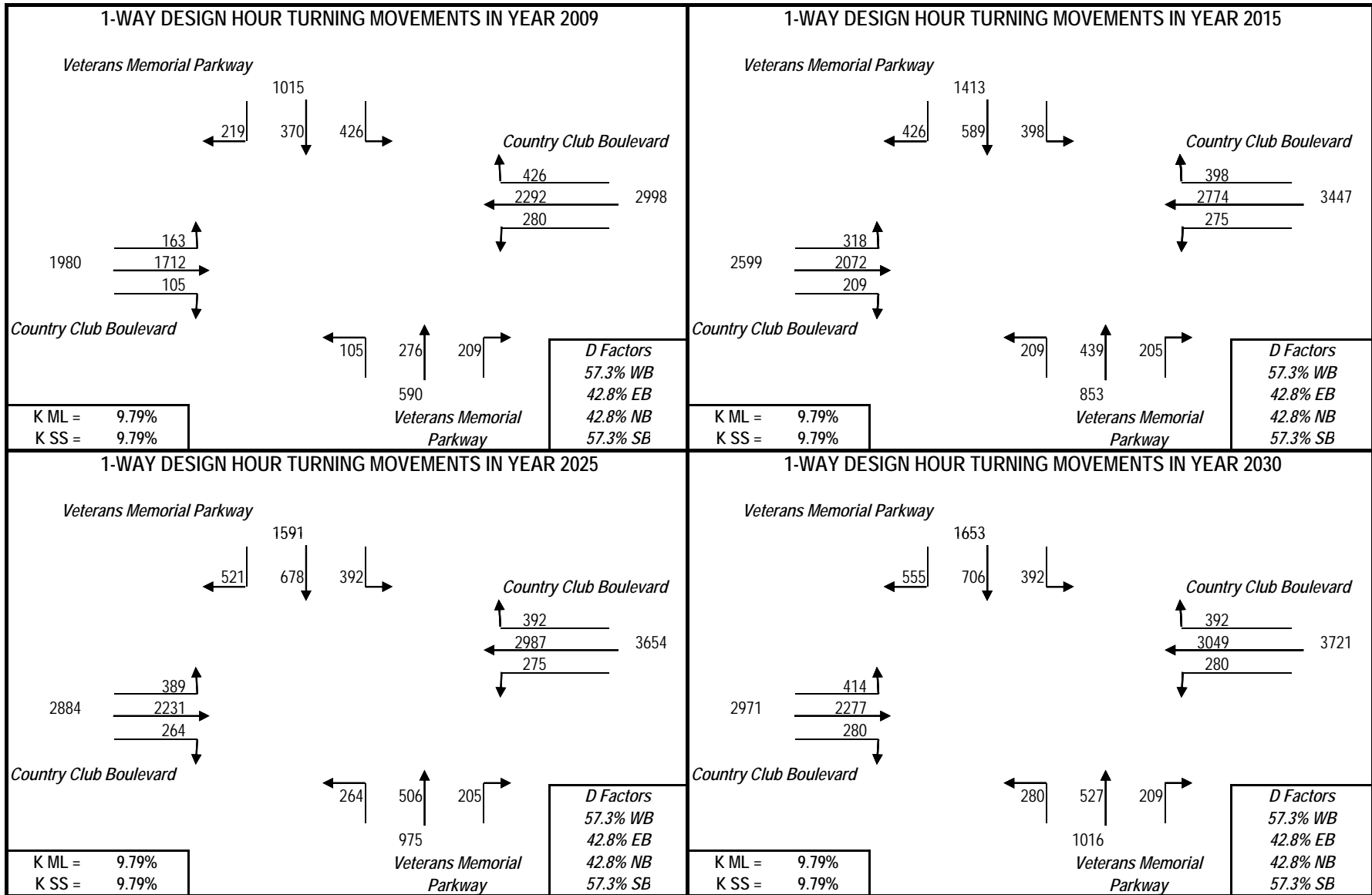


# PROJECT TRAFFIC FOR Country Club Boulevard AT Veterans Memorial Parkway: TO

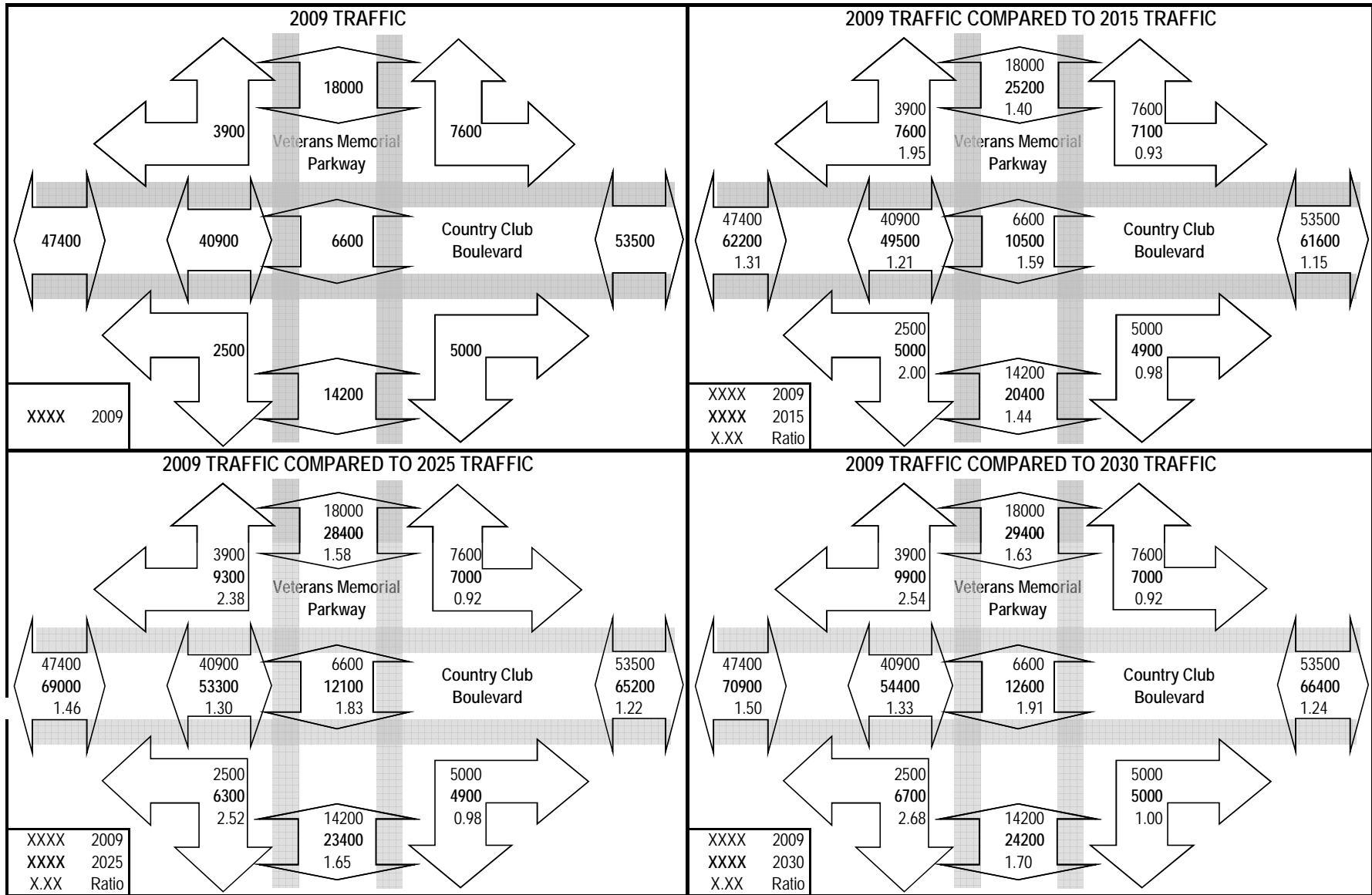




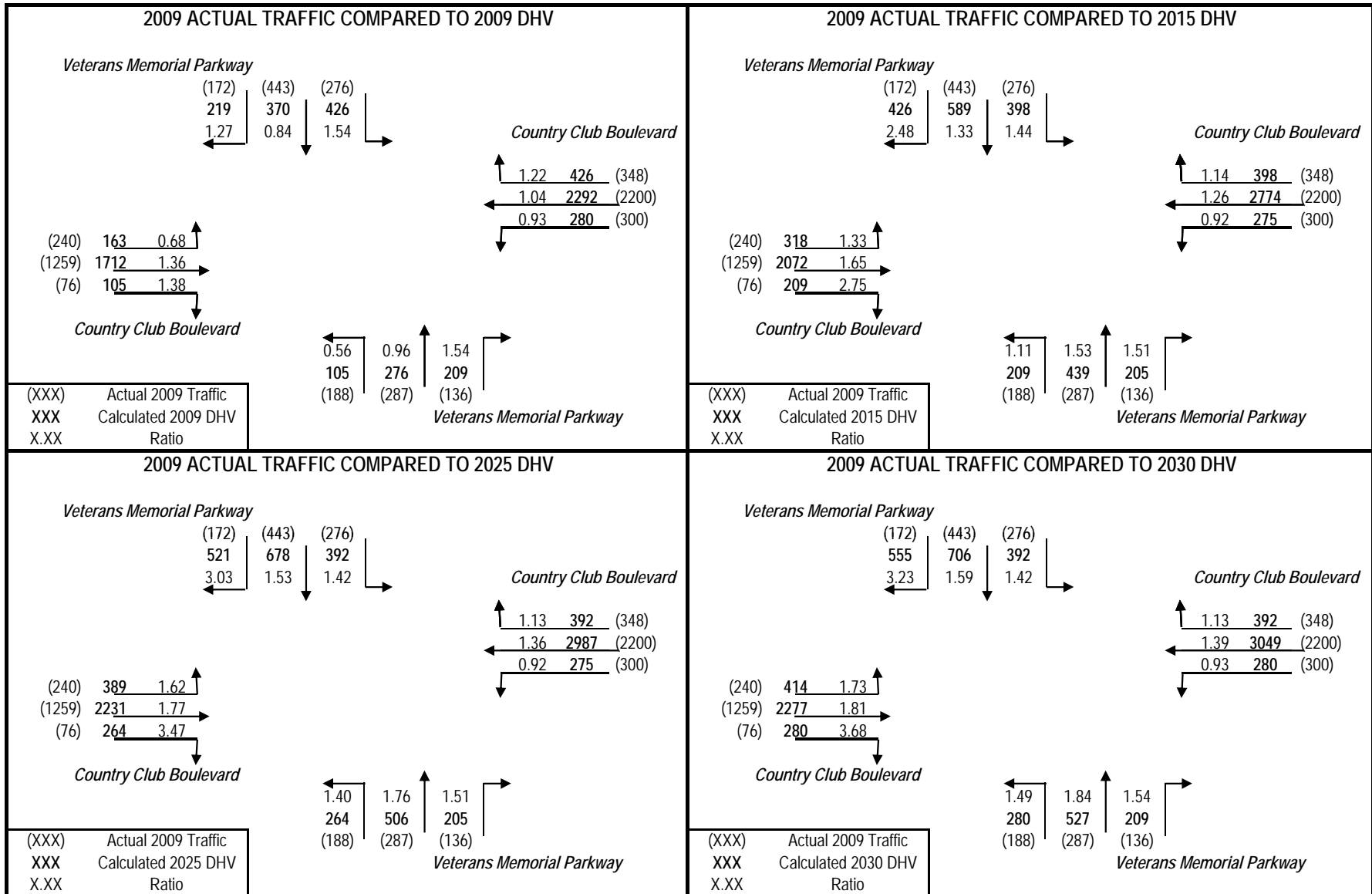
# PROJECT TRAFFIC FOR Country Club Boulevard AT Veterans Memorial Parkway: TO



# PROJECT TRAFFIC FOR Country Club Boulevard AT Veterans Memorial Parkway: TO



# PROJECT TRAFFIC FOR Country Club Boulevard AT Veterans Memorial Parkway: TO



***APPENDIX H***  
***NO-BUILD CORSIM RESULTS***

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**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2015 Intersection Level of Service**  
**No-Build - AM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	AM PK VOLUME	CORSIM Run 1 Seed # 14,780		CORSIM Run 2 Seed # 15,959		CORSIM Run 3 Seed # 28,517		CORSIM Run 4 Seed # 9,253		CORSIM Run 5 Seed # 29,313		CORSIM Run 6 Seed # 31,070		CORSIM Run 7 Seed # 1,796		CORSIM Run 8 Seed # 19,162		CORSIM Run 9 Seed # 27,910		CORSIM Run 10 Seed # 23,444		AVERAGE			CORSIM /Count (0.90<x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
		OVERALL				6503	6159	72.7	6229	71.7	6092	86.7	6160	74.3	6145	81.3	6143	88.4	6235	74.6	6207	76.0	6194	86.7	6142	74.0	6171	78.6			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	197	181	148.0	190	142.4	174	152.0	198	142.4	190	152.0	188	133.6	187	135.2	170	149.9	196	146.0	185	147.8	186	144.9	F	0.94		
		906	910	Thru	1949	1741	124.4	1761	122.5	1740	124.4	1731	123.4	1755	123.4	1724	123.9	1755	122.3	1752	122.9	1754	125.1	1750	122.8	1746	123.5	F	0.90		
		906	910	Right	79	66	78.0	54	85.8	52	84.4	62	85.1	58	82.0	55	83.3	62	77.0	69	80.5	57	82.4	48	90.0	58	82.8	F	0.74		
		OVERALL		2225	1988	125.0	2005	123.4	1966	125.8	1991	124.1	2003	124.9	1967	123.7	2004	122.1	1991	123.8	2007	125.9	1983	124.3	1991	124.3	F	0.89	-10.54%	5.108	
	Westbound	920	910	Left	468	440	115.0	464	105.1	469	259.5	441	119.0	478	208.0	471	298.3	464	119.9	477	148.7	478	217.5	464	112.4	465	170.3	F	0.99		
		920	910	Thru	1540	1487	28.7	1490	26.0	1429	30.8	1459	24.8	1398	26.6	1454	34.5	1502	29.9	1463	26.3	1461	29.0	1448	27.3	1459	28.4	C	0.95		
		920	910	Right	209	189	8.8	216	10.2	173	8.6	209	10.8	208	9.1	200	7.5	203	8.5	205	10.0	185	9.2	192	8.5	198	9.1	A	0.95		
		OVERALL		2217	2116	44.9	2170	41.3	2071	80.7	2109	43.1	2084	66.4	2125	66.4	2169	47.1	2145	52.0	2124	69.7	2104	44.4	2122	58.0	E	0.96	-4.30%	2.046	
	Northbound	911	910	Left	96	101	65.8	106	68.5	93	72.5	98	67.4	84	69.3	89	74.9	109	68.2	97	64.3	97	63.5	102	79.7	98	69.4	E	1.02		
		911	910	Thru	415	396	56.5	389	52.8	403	54.4	474	52.6	424	59.0	417	54.4	418	54.2	420	52.2	430	53.4	407	54.3	418	54.4	D	1.01		
		911	910	Right	527	539	36.1	537	37.6	536	40.1	464	35.2	528	36.0	530	36.3	509	36.9	522	36.8	508	35.2	532	37.6	521	36.8	D	0.99		
		OVERALL		1038	1036	46.8	1032	46.5	1032	48.6	1036	46.2	1036	48.1	1036	48.1	1036	46.9	1036	47.2	1039	45.6	1035	45.2	1041	48.2	1036	46.9	D	1.00	-0.20%
	Southbound	912	910	Left	400	383	91.1	396	97.3	397	104.4	451	115.9	389	97.1	388	95.2	426	110.3	404	104.1	431	157.5	390	109.4	406	108.2	F	1.01		
		912	910	Thru	426	422	44.8	425	49.8	433	48.2	378	48.7	426	50.7	431	48.2	406	50.2	430	52.2	411	48.4	416	48.9	418	49.0	D	0.98		
		912	910	Right	197	214	7.9	201	9.1	193	6.8	195	7.4	207	8.3	196	7.9	194	8.4	198	8.9	186	7.3	208	7.5	199	8.0	A	1.01		
		OVERALL		1023	1019	54.5	1022	60.2	1023	62.2	1024	70.4	1022	59.8	1015	58.4	1026	67.3	1032	64.2	1028	86.7	1014	63.7	1023	64.7	E	1.00	-0.05%	0.016	
<b>Intersection Total</b>					<b>6503</b>	<b>6159</b>	<b>72.7</b>	<b>6229</b>	<b>71.7</b>	<b>6092</b>	<b>86.7</b>	<b>6160</b>	<b>74.3</b>	<b>6145</b>	<b>81.3</b>	<b>6143</b>	<b>88.4</b>	<b>6235</b>	<b>74.6</b>	<b>6207</b>	<b>76.0</b>	<b>6194</b>	<b>86.7</b>	<b>6142</b>	<b>74.0</b>	<b>6171</b>	<b>78.6</b>	<b>E</b>	0.95		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	347	321	75.7	363	83.0	346	78.8	326	73.9	331	80.3	334	80.9	345	82.0	365	78.1	383	93.0	360	79.6	347	80.5	F	1.00		
		930	940	Thru	2253	2079	47.5	2090	47.7	2106	44.7	2051	45.1	2101	47.6	2071	47.6	2091	52.8	2058	42.8	2116	54.8	2110	46.4	2087	47.7	D	0.93		
		930	940	Right	276	257	11.1	241	11.6	230	10.2	259	11.9	235	11.3	237	11.7	232	14.4	261	11.3	240	15.0	223	11.0	242	12.0	B	0.88		
		OVERALL		2876	2657	47.4	2694	49.2	2682	46.2	2636	45.4	2667	48.5	2642	48.6	2668	53.2	2684	44.5	2739	56.6	2693	47.9	2676	48.8	D	1.00	-6.95%	3.792	
	Westbound	945	940	Left	390	433	98.2	413	88.5	436	118.3	424	89.0	417	93.2	391	88.8	404	96.5	416	107.4	433	93.9	438	110.1	421	98.4	F	1.08		
		945	940	Thru	1682	1653	39.6	1693	31.1	1633	33.8	1637	33.9	1666	31.4	1684	33.3	1674	34.0	1682	33.9	1671	33.8	1660	31.0	1665	33.6	C	0.99		
		945	940	Right	527	522	14.4	528	14.9	556	13.3	553	14.9	459	10.8	521	13.3	559	14.9	492	14.8	517	14.1	537	13.6	524	13.9	B	1.00		
		OVERALL		2599	2608	44.3	2634	36.8	2625	43.5	2614	38.8	2542	37.8	2596	37.7	2637	39.5	2590	42.1	2621	39.8	2635	40.6	2610	40.1	D	1.00	0.43%	0.219	
	Northbound	941	940	Left	251	188	132.9	224	128.4	171	118.3	207	213.3	182	160.0	192	191.6	208	117.8	223	224.5	201	185.3	198	107.2	199	157.9	F	0.79		
		941	940	Thru	762	563	123.0	595	114.6	568	97.2	628	209.0	606	149.1	611	189.1	593	111.8	615	205.1	614	184.8	587	106.7	598	149.0	F	0.78		
		941	940	Right	619	490	335.3	485	340.6	472	355.5	444	302.6	454	360.9	451	330.8	458	367.0	477	271.6	449	338.4	492	340.5	467	334.3	F	0.75		
		OVERALL		1632	1241	208.3	1304	201.0	1211	200.8	1279	242.2	1242	228.1	1254	240.4	1259	205.6	1315	232.5	1264	239.4	1277	196.8	1265	219.5	F	0.77	-22.51%	9.654	
	Southbound	942	940	Left	597	507	413.8	529	395.4	544	268.5	552	172.1	558	216.2	536	283.7	554	255.8	526	375.7	569	134.7	575	222.0	545	273.8	F	0.91		
		942	940	Thru	569	497	177.8	491	271.7	578	53.5	610	52.2	594	51.0	548	65.4	557	55.2	465	190.1	604	49.6	567	48.8	551	101.5	F	0.97		
		942	940	Right	284	271	67.5	272	115.8	274	13.5	246	16.6	268	18.4	281	17.0	293	16.9	253	56.2	265	17.4	261	14.5	268	35.4	D	0.95		
		OVERALL		1450	1275	248.2	1292	289.5	1396	129.4	1408	93.0	1420	109.7	1365	141.1	1404	126.3	1244	1438	77.4	1403	113.4	1365	156.9	F	0.94	-5.90%	2.279		
<b>Intersection Total</b>					<b>8557</b>	<b>7781</b>	<b>104.9</b>	<b>7924</b>	<b>109.3</b>	<b>7914</b>	<b>83.6</b>	<b>7937</b>	<b>83.4</b>	<b>7871</b>	<b>84.4</b>	<b>7857</b>	<b>91.7</b>	<b>7968</b>	<b>85.6</b>	<b>7833</b>	<b>106.5</b>	<b>8062</b>	<b>83.5</b>	<b>8008</b>	<b>80.7</b>	<b>7916</b>	<b>91.4</b>	<b>F</b>	0.93		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	301	226	87.7	257	81.5	294	90.3	297	80.1	243	86.8	251	81.4	306	89.6	245	81.0	298	89.1	277	98.6	269	86.6	F	0.90		
		960	970	Thru	2884	2593	36.3	2565	34.2	2587	36.7	2491	33.1	2598	35.0	2557	35.8	2579	37.4	2544	35.4	2577	34.8	2621	38.5	2571	35.7	D	0.89		
		960	970	Right	284	258	17.3	255	17.4	258	20.0	250	15.1	241	18.8	252	21.0	234	18.3	272	19.1	244	19.2	262	20.9	253	18.7	B	0.89		
		OVERALL		3469	3077	38.5	3077	36.7	3139	40.3	3038	36.2	3082	37.8	3060	38.3	3119	41.1	3061	37.6	3119	38.8	3160	42.3	3093	38.8	D	0.89	-10.83%	6.561	
	Westbound	980	970	Left	205	209	86.6	224	88.2	232	94.1	190	79.2	216	98.0	227	99.1	194	90.7	213	94.2	213	87.9	210	100.2	213	91.8	F	1.04		

**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2015 Intersection Level of Service**  
**No-Build - PM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	PM PK VOLUME	CORSIM Run 1 Seed # 14,940		CORSIM Run 2 Seed # 15,413		CORSIM Run 3 Seed # 17,187		CORSIM Run 4 Seed # 2,909		CORSIM Run 5 Seed # 6		CORSIM Run 6 Seed # 28,668		CORSIM Run 7 Seed # 25,966		CORSIM Run 8 Seed # 24,064		CORSIM Run 9 Seed # 22,560		CORSIM Run 10 Seed # 11,552		AVERAGE			CORSIM /Count (0.90-x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
						Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	397	400	81.4	376	85.9	403	99.7	421	91.1	427	88.8	370	85.0	396	88.4	426	72.8	415	82.6	346	80.4	398	85.6	F	1.00		
		906	910	Thru	1540	1574	39.7	1558	42.5	1532	40.7	1521	38.6	1527	40.1	1577	38.8	1553	43.1	1538	38.7	1539	39.7	1612	41.6	1553	40.3	D	1.01		
		906	910	Right	96	64	13.2	89	14.7	90	14.8	82	13.1	78	12.5	84	11.1	82	15.1	77	12.9	79	13.7	75	14.5	80	13.6	B	0.83		
		OVERALL				2033	2038	47.1	2023	49.4	2025	51.3	2024	48.5	2032	49.3	2031	46.0	2031	50.8	2041	44.9	2033	47.4	2033	47.2	2031	48.2	D	1.00	-0.09%
	Westbound	920	910	Left	647	666	94.1	668	90.5	703	98.8	688	93.1	631	94.1	627	91.2	707	138.8	616	96.3	621	87.5	672	111.9	660	99.6	F	1.02		
		920	910	Thru	1949	1889	26.7	1913	31.1	1953	32.3	1987	29.9	1992	30.0	1985	30.3	1928	40.1	1991	27.0	1970	29.7	1968	32.0	1958	30.9	C	1.00		
		920	910	Right	280	265	9.4	271	10.5	227	10.6	257	8.7	279	11.9	265	9.2	276	9.7	245	10.2	255	9.7	260	9.2	260	9.9	A	0.93		
		OVERALL				2876	2820	41.0	2852	43.1	2883	46.8	2932	42.9	2902	42.2	2877	41.6	2911	61.2	2852	40.5	2846	40.5	2900	48.5	2878	44.8	D	1.00	0.05%
	Northbound	911	910	Left	179	166	78.8	181	91.4	167	96.8	167	81.3	170	81.4	193	82.4	191	88.0	199	92.2	175	94.8	197	78.3	181	86.5	F	1.01		
		911	910	Thru	376	393	73.2	363	72.6	381	71.3	379	73.3	382	74.9	372	72.6	375	71.2	368	71.6	362	70.6	350	72.5	373	72.4	E	0.99		
		911	910	Right	468	457	36.6	472	40.7	469	39.8	476	34.5	468	38.5	457	37.0	457	37.3	456	39.2	477	39.1	474	36.4	466	37.9	D	1.00		
		OVERALL				1023	1016	57.7	1016	61.1	1017	60.9	1022	56.5	1020	59.3	1022	58.5	1023	59.2	1023	61.1	1014	60.0	1021	56.9	1019	59.1	E	1.00	-0.35%
	Southbound	912	910	Left	209	198	86.5	213	90.4	200	90.0	210	90.2	217	93.7	214	90.7	212	94.3	221	98.9	219	92.3	205	110.5	211	93.8	F	1.01		
		912	910	Thru	390	414	71.2	387	76.4	392	71.1	399	73.2	393	70.9	388	74.4	386	70.8	382	73.3	375	74.9	395	75.5	391	73.2	E	1.00		
		912	910	Right	97	83	9.4	94	11.7	108	12.2	87	13.3	82	11.8	94	8.5	95	11.3	87	11.5	104	9.8	89	15.3	92	11.5	B	0.95		
		OVERALL				696	695	68.2	694	71.9	700	67.4	696	70.9	692	71.1	696	70.5	693	69.8	690	73.7	698	70.7	689	78.1	694	71.2	E	1.00	-0.24%
<b>Intersection Total</b>					<b>6628</b>	<b>6569</b>	<b>48.3</b>	<b>6585</b>	<b>50.8</b>	<b>6625</b>	<b>52.5</b>	<b>6674</b>	<b>49.6</b>	<b>6646</b>	<b>50.0</b>	<b>6626</b>	<b>48.6</b>	<b>6658</b>	<b>58.6</b>	<b>6606</b>	<b>48.5</b>	<b>6591</b>	<b>48.8</b>	<b>6643</b>	<b>52.5</b>	<b>6622</b>	<b>50.8</b>	<b>D</b>	1.00		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	284	274	109.4	279	111.3	294	114.7	291	98.9	277	110.4	293	110.7	247	107.3	302	108.7	305	103.9	323	119.8	289	109.5	F	1.02		
		930	940	Thru	1682	1723	36.3	1726	40.9	1701	36.9	1692	41.6	1690	40.1	1710	37.5	1718	41.0	1648	42.0	1686	39.1	1697	40.8	1699	39.6	D	1.01		
		930	940	Right	251	229	13.2	234	15.0	229	12.8	220	14.6	241	14.4	257	13.1	252	12.6	257	16.2	262	15.6	267	13.1	245	14.1	B	0.98		
		OVERALL				2217	2226	42.9	2239	46.9	2224	44.7	2203	46.5	2208	46.1	2260	44.2	2217	45.1	2207	48.1	2253	45.1	2287	48.7	2232	45.8	D	1.01	0.69%
	Westbound	945	940	Left	679	673	111.8	709	113.6	694	109.1	703	101.3	726	116.9	680	104.6	628	107.9	724	116.6	736	123.1	691	122.5	696	112.7	F	1.03		
		945	940	Thru	2253	2192	24.0	2204	25.4	2279	28.8	2272	27.5	2243	24.2	2234	29.3	2290	29.3	2261	26.9	2223	30.8	2245	27.7	2244	27.4	C	1.00		
		945	940	Right	427	410	7.7	429	8.4	436	9.8	405	9.4	384	8.7	420	10.0	409	10.1	410	11.1	443	9.6	410	10.1	416	9.5	A	0.97		
		OVERALL				3359	3275	40.0	3342	42.0	3409	42.7	3380	40.7	3353	42.5	3334	42.2	3327	41.8	3395	44.1	3402	48.0	3346	45.1	3356	42.9	D	1.00	-0.08%
	Northbound	941	940	Left	276	266	105.6	286	143.0	280	94.2	299	144.8	300	152.1	296	118.2	275	200.5	279	173.0	307	174.3	304	148.3	289	145.4	F	1.05		
		941	940	Thru	569	522	81.8	562	80.3	556	74.0	556	87.9	561	76.2	543	79.8	547	103.2	571	87.8	571	81.9	551	86.1	554	83.9	F	0.97		
		941	940	Right	390	425	75.3	386	75.3	394	72.5	398	89.4	363	70.0	403	84.9	409	94.2	374	79.2	353	70.4	379	82.0	388	79.3	E	1.00		
		OVERALL				1235	1213	84.7	1234	93.3	1230	78.1	1253	102.0	1224	93.0	1242	90.6	1231	121.9	1224	104.6	1231	101.7	1234	100.2	1232	97.0	F	1.00	-0.28%
	Southbound	942	940	Left	527	508	88.8	518	86.2	520	88.7	558	90.9	543	91.2	562	99.4	536	100.6	537	94.6	561	107.7	551	105.1	539	95.3	F	1.02		
		942	940	Thru	762	770	81.3	747	95.5	763	96.7	718	84.8	765	89.6	721	73.0	756	81.4	757	85.3	767	91.3	724	87.0	749	86.6	F	0.98		
		942	940	Right	347	344	25.6	353	26.6	339	26.2	358	29.8	343	28.9	357	27.2	364	26.2	340	28.3	325	25.1	344	25.3	347	26.9	C	1.00		
		OVERALL				1636	1622	71.8	1618	77.5	1622	79.4	1634	74.8	1651	77.5	1640	72.1	1656	75.5	1634	76.5	1653	83.8	1619	80.1	1635	76.9	E	1.00	-0.07%
<b>Intersection Total</b>					<b>8447</b>	<b>8336</b>	<b>53.5</b>	<b>8433</b>	<b>57.6</b>	<b>8485</b>	<b>55.4</b>	<b>8470</b>	<b>57.8</b>	<b>8436</b>	<b>57.6</b>	<b>8476</b>	<b>55.6</b>	<b>8431</b>	<b>61.0</b>	<b>8460</b>	<b>60.2</b>	<b>8539</b>	<b>61.9</b>	<b>8486</b>	<b>60.8</b>	<b>8455</b>	<b>58.1</b>	<b>E</b>	1.00		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	318	325	104.5	343	135.0	310	104.5	316	92.4	324	107.5	344	101.6	361	130.2	329	109.1	332	120.8	339	114.6	332	112.0	F	1.04		
		960	970	Thru	2072	2082	19.3	2057	22.4	2113	18.5	2129	19.4	2046	19.7	2110	19.4	2063	19.2	2066	19.7	2053	21.7	2107	20.1	2083	19.9	B	1.01		
		960	970	Right	209	229	10.7	217	8.7	193	7.7	210	8.9	233	9.0	223	7.3	223	9.3	188	8.9	199	6.7	187	8.0	210	8.5	A	1.01		
		OVERALL				2599	2636	29.0	2617	36.0	2616	27.9	2655	27.3	2603	29.7	2677	28.9	2647	33.5	2583	30.3	2584	33.3	2633	31.4	2625	30.7	C	1.01	1.00%
	Westbound	980	970	Left	305	304	83.3	286	83.4	299	81.4	324	85.0	304	87.3	306	78.4	308	83.3	299	85.4	287	82.6	298	82.0	302	83.2	F	0.99		
		980	970	Thru	2774	2777	32.6	2819	34.1	2823	34.1	2773	31.7	2782																	

**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2035 Intersection Level of Service**  
**No-Build - AM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	AM PK VOLUME	CORSIM Run 1 Seed # 13,336		CORSIM Run 2 Seed # 18,946		CORSIM Run 3 Seed # 5,860		CORSIM Run 4 Seed # 13,622		CORSIM Run 5 Seed # 22,595		CORSIM Run 6 Seed # 14,161		CORSIM Run 7 Seed # 2,922		CORSIM Run 8 Seed # 24,791		CORSIM Run 9 Seed # 7,010		CORSIM Run 10 Seed # 2,597		AVERAGE			CORSIM /Count (0.90<x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	372	277	135.3	241	139.7	262	138.9	293	144.0	273	146.4	274	138.9	250	132.5	286	142.5	265	147.6	293	141.9	271	140.8	F	0.73		
		906	910	Thru	2544	1770	117.1	1750	118.7	1732	117.8	1785	113.7	1783	115.8	1780	117.6	1774	117.5	1784	114.8	1771	116.1	1754	115.6	1768	116.5	F	0.70		
		906	910	Right	79	36	72.1	45	83.0	47	82.6	42	66.0	38	74.6	40	81.2	55	72.9	52	75.3	54	72.5	45	76.5	45	76.5	E	0.57		
		OVERALL				2995	2083	118.8	2036	120.4	2041	119.7	2120	117.0	2094	119.1	2093	119.7	2064	118.6	2125	117.5	2088	119.0	2101	118.2	2085	118.8	F	0.70	-30.40%
	Westbound	920	910	Left	672	532	412.2	538	380.1	501	442.7	520	373.8	520	374.5	518	417.3	542	372.5	524	367.0	511	425.0	527	406.5	523	397.2	F	0.78		
		920	910	Thru	1901	1594	68.5	1629	74.7	1686	58.0	1689	58.6	1607	113.8	1501	94.8	1710	46.8	1533	128.5	1601	87.4	1689	67.9	1624	79.9	E	0.85		
		920	910	Right	244	201	21.6	208	23.6	193	15.1	189	17.4	185	38.3	211	26.0	211	17.6	201	40.5	202	29.4	204	25.0	201	25.5	C	0.82		
		OVERALL				2817	2327	143.1	2375	139.4	2380	135.5	2398	123.7	2312	166.4	2230	163.2	2463	116.0	2258	176.0	2314	156.9	2420	138.0	2348	145.8	F	0.83	-16.66%
	Northbound	911	910	Left	133	139	81.2	143	75.8	134	71.5	144	71.6	140	78.6	136	79.7	142	72.6	149	81.8	162	77.2	133	66.6	142	75.7	E	1.07		
		911	910	Thru	427	428	54.5	428	56.1	429	52.5	422	55.7	414	53.6	436	56.7	399	54.3	400	55.9	439	55.3	428	56.6	422	55.1	E	0.99		
		911	910	Right	597	592	64.8	589	57.5	591	59.2	597	68.2	600	60.9	578	46.0	608	66.4	610	74.0	558	51.9	599	55.2	592	60.4	E	0.99		
		OVERALL				1157	1159	62.9	1160	59.2	1154	58.1	1163	64.1	1154	60.5	1150	54.0	1149	63.0	1159	68.8	1159	56.8	1160	57.0	1157	60.4	E	1.00	-0.03%
	Southbound	912	910	Left	402	392	141.2	397	154.1	399	305.1	391	172.9	383	166.5	411	278.5	382	103.8	414	134.3	401	354.5	399	205.6	397	201.7	F	0.99		
		912	910	Thru	438	446	51.5	443	51.5	430	50.2	443	52.2	427	51.4	447	52.6	439	52.7	439	51.6	440	54.4	438	51.7	439	52.0	D	1.00		
		912	910	Right	347	329	15.1	336	15.0	335	16.1	344	17.3	351	15.1	335	14.4	364	20.3	344	15.2	319	19.6	331	15.5	339	16.4	B	0.98		
		OVERALL				1187	1167	71.4	1176	75.7	1164	127.8	1178	82.1	1161	78.4	1193	119.7	1185	59.2	1197	69.7	1160	148.6	1168	94.0	1175	92.7	F	0.99	-1.02%
<b>Intersection Total</b>					<b>8156</b>	<b>6736</b>	<b>109.3</b>	<b>6747</b>	<b>108.8</b>	<b>6739</b>	<b>116.1</b>	<b>6859</b>	<b>104.4</b>	<b>6721</b>	<b>118.3</b>	<b>6666</b>	<b>122.9</b>	<b>6861</b>	<b>98.1</b>	<b>6739</b>	<b>120.2</b>	<b>6721</b>	<b>126.4</b>	<b>6849</b>	<b>110.7</b>	<b>6764</b>	<b>113.5</b>	<b>F</b>	<b>0.83</b>		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	414	323	74.4	326	76.0	327	72.2	332	76.1	352	74.7	341	78.3	326	77.4	332	79.7	327	76.8	321	73.8	331	75.9	E	0.80		
		930	940	Thru	2742	2162	45.3	2154	45.9	2106	43.6	2158	42.4	2142	43.6	2159	50.6	2154	42.3	2197	44.2	2089	45.9	2126	44.2	2145	44.8	D	0.78		
		930	940	Right	387	255	13.2	259	12.9	285	15.6	263	14.4	261	12.5	269	15.4	279	14.6	275	15.6	316	17.8	302	15.0	276	14.7	B	0.71		
		OVERALL				3543	2740	45.8	2739	46.4	2718	44.1	2753	43.8	2755	44.7	2769	50.6	2759	43.6	2804	45.6	2732	46.4	2749	44.4	2752	45.5	D	0.78	-22.33%
	Westbound	945	940	Left	561	534	89.7	576	140.5	556	278.4	575	118.6	569	169.4	574	113.9	596	138.3	578	118.5	587	172.1	571	150.4	572	149.0	F	1.02		
		945	940	Thru	2122	2100	45.5	2104	41.4	2009	61.0	2091	40.4	2104	44.8	2112	39.6	2126	42.7	2144	42.5	2095	43.9	2128	45.4	2101	44.7	D	0.99		
		945	940	Right	585	529	18.8	559	20.1	538	26.0	579	17.6	543	20.0	548	18.2	564	20.3	591	19.5	545	19.7	542	19.4	554	20.0	B	0.95		
		OVERALL				3268	3163	48.5	3239	55.4	3103	93.8	3245	50.2	3216	62.7	3234	49.1	3286	56.2	3313	51.6	3227	63.2	3241	59.5	3227	59.0	E	0.99	-1.26%
	Northbound	941	940	Left	387	251	304.2	254	309.2	260	336.8	258	321.7	253	313.4	248	314.9	247	277.0	257	289.6	266	323.7	225	307.2	252	309.8	F	0.65		
		941	940	Thru	949	624	263.8	624	262.3	615	245.1	609	254.3	592	258.1	613	254.4	592	267.7	581	273.2	605	260.1	598	279.8	605	261.9	F	0.64		
		941	940	Right	626	378	239.1	374	233.6	372	211.8	393	224.3	385	254.4	367	260.0	429	245.8	377	277.1	351	234.0	355	259.4	378	243.9	F	0.60		
		OVERALL				1962	1253	264.4	1252	263.2	1247	254.3	1260	258.8	1230	268.3	1228	268.3	1268	262.1	1215	277.8	1222	266.5	1178	278.9	1235	266.3	F	0.63	-37.04%
	Southbound	942	940	Left	605	500	375.7	466	464.2	473	361.7	465	407.4	481	443.0	481	404.5	485	391.1	489	408.1	469	428.8	463	442.2	477	412.7	F	0.79		
		942	940	Thru	710	631	233.2	560	246.8	601	231.3	578	289.3	596	262.7	653	165.8	574	254.4	598	198.4	656	205.9	579	258.7	603	234.7	F	0.85		
		942	940	Right	308	281	79.1	273	91.2	258	86.7	260	108.7	269	100.6	285	54.4	258	111.6	298	79.8	265	80.6	305	98.6	275	89.1	F	0.89		
		OVERALL				1623	1412	253.0	1299	292.1	1332	249.6	1303	295.4	1346	294.7	1419	224.3	1317	276.8	1385	246.9	1390	257.2	1347	285.5	1355	267.6	F	0.83	-16.51%
<b>Intersection Total</b>					<b>10396</b>	<b>8568</b>	<b>112.9</b>	<b>8529</b>	<b>119.1</b>	<b>8400</b>	<b>126.3</b>	<b>8561</b>	<b>116.2</b>	<b>8547</b>	<b>123.0</b>	<b>8650</b>	<b>109.5</b>	<b>8630</b>	<b>116.1</b>	<b>8717</b>	<b>112.2</b>	<b>8571</b>	<b>118.3</b>	<b>8515</b>	<b>120.8</b>	<b>8569</b>	<b>117.4</b>	<b>F</b>	<b>0.82</b>		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	311	231	97.2	241	89.3	233	95.5	253	88.4	254	101.9	255	98.4	250	90.2	217	88.3	226	82.0	215	101.9	238	93.3	F	0.76		
		960	970	Thru	3354	2628	38.2	2575	37.2	2513	38.8	2544	35.4	2538	37.1	2518	35.9	2582	35.5	2604	35.7	2455	34.8	2478	40.4	2544	36.9	D	0.76		
		960	970	Right	308	216	18.6	193	17.9	205	18.0	228	17.6	229	19.1	218	19.6	211	20.5	215	18.7	212	17.1	220	22.4	215	18.9	B	0.70		
		OVERALL				3973	3075	41.2	3009	40.2	2951	41.9	3025	38.5	3021	41.2	2991	40.0	3043	38.9	3036	38.2	2893	37.2	2913	43.5	2996	40.1	D	0.75	-24.60%
	Westbound	980	970	Left	230	260	120.1	229	91.8	274	128.7	250	125.8	247	120.3	246	122.1	224	105.7	221	104.1	252	111.8	262	137.5	247	116.8	F	1.07		
		980	970	Thru	2505	2479	30.3	2537	33.0																						

**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2035 Intersection Level of Service**  
**No-Build - PM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	PM PK VOLUME	CORSIM Run 1		CORSIM Run 2		CORSIM Run 3		CORSIM Run 4		CORSIM Run 5		CORSIM Run 6		CORSIM Run 7		CORSIM Run 8		CORSIM Run 9		CORSIM Run 10		AVERAGE			CORSIM /Count (0.90-x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Seed # 14,133	Delay (Sec/Veh)	Seed # 24,922	Delay (Sec/Veh)	Seed # 11,634	Delay (Sec/Veh)	Seed # 20,822	Delay (Sec/Veh)	Seed # 17,760	Delay (Sec/Veh)	Seed # 17,583	Delay (Sec/Veh)	Seed # 23,633	Delay (Sec/Veh)	Seed # 1,052	Delay (Sec/Veh)	Seed # 31,192	Delay (Sec/Veh)	Seed # 24,968	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
						Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	906	910	Left	422	388	166.9	423	315.2	417	200.5	387	145.6	376	161.9	431	293.4	416	156.9	382	181.3	373	204.4	424	253.7	402	208.0	F	0.95		
		906	910	Thru	1901	1741	106.4	1718	79.4	1799	104.2	1815	94.5	1758	111.4	1754	87.5	1801	89.1	1755	109.5	1782	106.7	1789	81.2	1771	97.0	F	0.93		
		906	910	Right	133	111	66.6	103	41.2	117	64.4	126	57.9	103	71.2	131	48.9	121	56.1	125	70.0	105	66.4	120	43.7	116	58.6	E	0.87		
				OVERALL	2456	2240	114.9	2244	122.1	2333	119.4	2328	101.0	2237	118.0	2316	123.7	2338	99.5	2262	119.4	2260	121.0	2333	110.6	2289	115.0	F	0.93	-6.80%	3.426
	Westbound	920	910	Left	672	452	223.4	453	229.7	484	211.8	474	195.8	481	205.7	480	201.9	427	229.8	480	204.4	533	201.0	441	217.2	471	212.1	F	0.70		
		920	910	Thru	2544	1806	152.3	1826	149.5	1835	147.1	1842	145.0	1905	132.8	1910	136.7	1750	157.2	1871	132.4	1930	114.6	1773	151.3	1845	141.9	F	0.73		
		920	910	Right	327	242	49.6	251	51.1	250	42.6	256	41.3	226	40.8	256	40.3	260	50.5	300	40.0	260	29.0	263	48.7	256	43.4	D	0.78		
				OVERALL	3543	2500	155.2	2530	154.1	2569	149.1	2572	144.0	2612	138.3	2646	139.2	2437	158.6	2651	135.0	2723	123.3	2477	152.1	2572	144.9	F	0.73	-27.41%	17.566
	Northbound	911	910	Left	179	178	87.1	176	101.9	183	101.8	168	109.5	168	125.5	191	81.9	176	98.4	171	121.6	143	124.5	187	87.7	174	104.0	F	0.97		
		911	910	Thru	438	435	66.8	430	83.7	408	88.2	386	85.9	397	108.0	458	59.4	429	87.2	411	109.9	382	105.9	418	68.0	415	86.3	F	0.95		
		911	910	Right	672	626	216.8	613	323.9	612	326.6	617	283.9	624	348.4	642	120.2	613	333.2	614	352.2	620	385.2	604	307.6	619	299.8	F	0.92		
				OVERALL	1289	1239	145.5	1219	207.1	1203	211.6	1171	193.6	1189	236.6	1291	93.0	1218	212.6	1196	236.0	1145	259.5	1209	190.8	1208	198.6	F	0.94	-6.28%	2.292
	Southbound	912	910	Left	244	256	125.5	248	103.6	252	116.0	228	87.5	233	105.3	265	114.6	245	104.0	229	92.6	211	108.6	272	112.5	244	107.0	F	1.00		
		912	910	Thru	427	445	64.0	415	60.8	439	64.2	441	64.8	459	64.3	443	63.8	422	63.3	447	63.0	472	65.1	420	62.8	440	63.6	E	1.03		
		912	910	Right	272	247	19.0	278	20.7	255	23.6	271	22.6	257	23.3	237	19.6	273	19.6	268	19.1	259	25.6	248	22.3	259	21.5	C	0.95		
				OVERALL	943	948	68.9	941	60.2	946	67.0	940	58.1	949	63.2	945	67.0	940	61.2	944	57.7	942	64.0	940	66.5	944	63.4	E	1.00	0.05%	0.016
<b>Intersection Total</b>					<b>8231</b>	<b>6927</b>	<b>128.6</b>	<b>6934</b>	<b>140.3</b>	<b>7051</b>	<b>138.9</b>	<b>7011</b>	<b>126.5</b>	<b>6987</b>	<b>138.3</b>	<b>7198</b>	<b>116.4</b>	<b>6933</b>	<b>134.9</b>	<b>7053</b>	<b>136.8</b>	<b>7070</b>	<b>136.7</b>	<b>6959</b>	<b>133.4</b>	<b>7012</b>	<b>133.1</b>	<b>F</b>	<b>0.85</b>		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	930	940	Left	308	307	184.5	265	168.3	276	152.5	267	184.0	271	171.6	260	172.0	252	173.8	297	172.0	228	196.7	273	187.1	270	176.3	F	0.88		
		930	940	Thru	2122	1869	170.7	1875	154.7	1909	132.1	1885	178.0	1867	169.4	1846	173.4	1854	173.4	1863	159.7	1866	184.0	1917	180.0	1875	167.6	F	0.88		
		930	940	Right	387	328	102.9	326	83.8	333	96.5	315	104.5	333	96.5	306	95.0	341	100.7	322	89.2	303	108.5	309	107.8	322	94.8	F	0.83		
				OVERALL	2817	2504	163.5	2466	146.8	2518	124.7	2467	169.3	2471	159.8	2412	163.3	2447	163.3	2482	152.1	2397	175.7	2499	171.8	2466	159.0	F	0.88	-12.45%	6.823
	Westbound	945	940	Left	746	666	118.4	683	134.3	669	116.7	701	129.4	662	116.3	657	102.4	703	140.2	705	143.3	678	160.1	693	109.3	682	120.0	F	0.91		
		945	940	Thru	2742	2311	56.0	2369	63.5	2374	47.2	2368	51.2	2352	40.9	2418	43.0	2352	59.9	2315	51.6	2352	45.9	2332	42.1	2354	50.1	D	0.86		
		945	940	Right	585	481	26.8	473	32.1	521	21.9	510	25.8	493	15.1	493	15.5	470	25.4	496	23.5	479	16.9	523	16.0	494	21.9	C	0.84		
				OVERALL	4073	3458	63.9	3525	73.0	3564	56.5	3579	62.9	3507	51.5	3568	50.1	3525	71.3	3516	66.0	3509	64.0	3548	51.4	3530	61.1	E	0.87	-13.33%	8.809
	Northbound	941	940	Left	387	224	712.1	253	591.3	290	375.7	275	550.7	276	584.6	302	242.3	250	517.1	314	199.2	318	364.2	292	480.1	279	461.7	F	0.72		
		941	940	Thru	710	454	178.3	495	169.6	586	140.1	515	152.1	473	147.1	613	157.2	549	148.3	588	164.8	528	145.3	527	150.4	533	155.3	F	0.75		
		941	940	Right	561	364	114.2	354	120.0	453	112.1	395	100.5	401	93.0	471	155.9	411	99.6	482	165.1	495	105.9	403	108.3	423	117.5	F	0.75		
				OVERALL	1658	1042	270.7	1102	250.5	1329	182.0	1185	227.4	1150	233.2	1386	175.3	1210	208.0	1384	172.7	1341	182.7	1222	215.3	1235	211.8	F	0.74	-25.51%	11.119
	Southbound	942	940	Left	585	453	317.0	413	478.6	398	493.7	390	428.7	398	438.2	423	520.5	422	420.7	418	425.0	334	458.6	402	452.7	405	443.4	F	0.69		
		942	940	Thru	949	755	276.5	647	498.9	628	566.0	657	569.1	704	540.0	631	552.6	685	489.0	675	487.3	688	586.4	643	588.0	671	515.4	F	0.71		
		942	940	Right	414	352	124.2	319	176.7	314	210.3	297	185.8	318	194.4	267	208.8	306	166.9	319	163.7	308	211.4	316	209.5	312	185.2	F	0.75		
				OVERALL	1948	1560	253.9	1379	418.3	1340	461.2	1344	443.7	1420	434.1	1321	472.8	1413	398.8	1412	395.8	1330	467.5	1361	460.1	1388	420.6	F	0.71	-28.75%	13.712
<b>Intersection Total</b>					<b>10496</b>	<b>8564</b>	<b>152.8</b>	<b>8472</b>	<b>173.8</b>	<b>8751</b>	<b>157.2</b>	<b>8575</b>	<b>175.9</b>	<b>8548</b>	<b>170.8</b>	<b>8687</b>	<b>165.8</b>	<b>8595</b>	<b>170.6</b>	<b>8794</b>	<b>160.0</b>	<b>8577</b>	<b>176.3</b>	<b>8630</b>	<b>173.9</b>	<b>8619</b>	<b>167.7</b>	<b>F</b>	<b>0.82</b>		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	960	970	Left	455	380	112.0	363	107.5	409	111.9	380	94.1	363	149.5	368	94.3	370	95.3	385	100.0	363	109.4	362	127.0	374	110.1	F	0.82		
		960	970	Thru	2505	2043	23.5	2068	23.3	2149	23.0	2073	19.2	2074	24.9	2124	21.7	2102	20.6	2162	21.8	2111	20.5	2154	24.8	2106	22.3	C	0.84		
		960	970	Right	308	251	8.6	236	9.7	226	9.2	249	9.5	229	10.0	253	9.9	235	8.4	235	8.9	228	7.6	222	10.5	236	9.2	A	0.77		
				OVERALL	3268	2674	34.7	2667	33.5	2784	35.0	2702	28.8	2667	40.6	2745	30.4	2707	29.7	2782	31.5	2702	31.4	2738	37.2	2717	33.3	C	0.83	-16.87%	10.078
	Westbound	980	970	Left	308	296	135.1	289	139.7	307	142.4	283	130.2	287	141.0	30															



***APPENDIX I***  
***ALTERNATIVE 1 CORSIM RESULTS***

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**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2015 Intersection Level of Service**  
**Alternative 1 - AM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	AM PK VOLUME	CORSIM Run 1		CORSIM Run 2		CORSIM Run 3		CORSIM Run 4		CORSIM Run 5		CORSIM Run 6		CORSIM Run 7		CORSIM Run 8		CORSIM Run 9		CORSIM Run 10		AVERAGE			CORSIM /Count	Volume Percent Difference on Links	GEH Statistic (x<5.0)	
		A	B			Seed # 31,565	Delay (Sec/Veh)	Seed # 4,679	Delay (Sec/Veh)	Seed # 1,377	Delay (Sec/Veh)	Seed # 8,585	Delay (Sec/Veh)	Seed # 9,855	Delay (Sec/Veh)	Seed # 3,067	Delay (Sec/Veh)	Seed # 23,952	Delay (Sec/Veh)	Seed # 11,553	Delay (Sec/Veh)	Seed # 27,485	Delay (Sec/Veh)	Seed # 4,893	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS				
						Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume		Volume						
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	907	910	Left	197	182	59.4	180	60.2	235	60.2	194	60.2	200	55.3	194	60.5	164	60.5	200	56.4	174	57.3	183	58.3	191	58.8	E	0.97			
		907	910	Thru	33	30	28.4	29	43.1	37	45.8	29	39.4	27	32.7	28	34.3	33	37.7	23	39.4	33	33.6	28	32.8	30	36.7	D	0.90			
		907	910	Right	79	77	7.4	81	8.7	75	7.9	77	8.0	69	8.5	73	6.6	71	8.1	77	8.9	72	7.5	75	7.7	75	7.9	A	0.95			
		<b>OVERALL</b>					<b>309</b>	<b>289</b>	<b>42.3</b>	<b>290</b>	<b>44.1</b>	<b>347</b>	<b>47.4</b>	<b>300</b>	<b>44.8</b>	<b>296</b>	<b>42.3</b>	<b>295</b>	<b>44.6</b>	<b>268</b>	<b>43.8</b>	<b>300</b>	<b>42.9</b>	<b>279</b>	<b>41.6</b>	<b>286</b>	<b>42.5</b>	<b>295</b>	<b>43.6</b>	D	0.95	-4.53%
	Westbound	916	910	Left	468	478	53.1	469	52.4	479	57.6	509	54.3	468	51.5	510	55.4	491	52.7	530	52.2	467	54.3	470	56.0	487	53.9	D	1.04			
		916	910	Thru	15	15	26.1	14	30.1	19	33.8	16	31.6	17	30.0	12	25.8	13	25.0	10	20.5	5	27.0	12	33.8	13	28.4	C	0.89			
		916	910	Right	209	226	7.1	218	7.3	193	7.3	181	6.3	226	8.7	191	7.6	205	7.1	185	7.2	210	7.1	212	5.9	205	7.2	A	0.98			
		<b>OVERALL</b>					<b>692</b>	<b>719</b>	<b>38.1</b>	<b>701</b>	<b>37.9</b>	<b>691</b>	<b>42.9</b>	<b>706</b>	<b>41.5</b>	<b>711</b>	<b>37.4</b>	<b>713</b>	<b>42.1</b>	<b>709</b>	<b>39.0</b>	<b>725</b>	<b>40.3</b>	<b>682</b>	<b>39.6</b>	<b>694</b>	<b>40.3</b>	<b>705</b>	<b>39.9</b>	D	1.02	1.89%
	Northbound	911	910	Left	96	114	58.2	101	68.4	102	63.8	106	59.1	103	58.2	99	59.0	111	61.5	117	60.8	115	56.0	115	66.4	108	61.1	E	1.13			
		911	910	Thru	415	421	37.6	419	38.3	424	35.7	395	37.3	448	38.6	427	38.0	418	38.1	416	37.8	434	40.7	392	36.1	419	37.8	D	1.01			
		911	910	Right	527	508	7.7	523	7.3	520	7.8	541	7.5	493	6.8	519	7.2	516	7.6	505	8.1	491	6.9	532	7.4	515	7.4	A	0.98			
		<b>OVERALL</b>					<b>1038</b>	<b>1043</b>	<b>25.3</b>	<b>1043</b>	<b>25.7</b>	<b>1046</b>	<b>24.6</b>	<b>1042</b>	<b>24.1</b>	<b>1044</b>	<b>25.5</b>	<b>1045</b>	<b>24.7</b>	<b>1045</b>	<b>25.5</b>	<b>1038</b>	<b>25.9</b>	<b>1040</b>	<b>26.4</b>	<b>1039</b>	<b>24.7</b>	<b>1043</b>	<b>25.3</b>	C	1.00	0.43%
	Southbound	912	910	Left	400	419	55.2	405	55.5	403	54.9	399	53.7	433	53.9	422	52.4	437	55.4	410	53.5	433	54.5	409	54.8	417	54.4	D	1.04			
		912	910	Thru	426	424	29.4	415	27.8	436	30.0	417	28.3	402	27.0	407	28.7	396	26.1	431	30.5	409	30.0	412	27.9	415	28.6	C	0.97			
		912	910	Right	197	187	4.1	209	3.7	190	4.1	214	4.0	195	3.9	208	4.1	199	3.9	188	3.8	183	4.0	208	3.5	198	3.9	A	1.01			
		<b>OVERALL</b>					<b>1023</b>	<b>1030</b>	<b>35.3</b>	<b>1029</b>	<b>33.8</b>	<b>1029</b>	<b>35.0</b>	<b>1030</b>	<b>33.1</b>	<b>1030</b>	<b>33.9</b>	<b>1037</b>	<b>33.4</b>	<b>1032</b>	<b>34.2</b>	<b>1029</b>	<b>34.8</b>	<b>1025</b>	<b>35.7</b>	<b>1029</b>	<b>33.7</b>	<b>1030</b>	<b>34.3</b>	C	1.01	0.68%
<b>Intersection Total</b>					<b>3062</b>	<b>3081</b>	<b>33.2</b>	<b>3063</b>	<b>33.0</b>	<b>3113</b>	<b>34.6</b>	<b>3078</b>	<b>33.1</b>	<b>3081</b>	<b>32.7</b>	<b>3090</b>	<b>33.5</b>	<b>3054</b>	<b>33.2</b>	<b>3092</b>	<b>33.9</b>	<b>3026</b>	<b>33.9</b>	<b>3048</b>	<b>33.0</b>	<b>3073</b>	<b>33.4</b>	C	1.00			
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	933	940	Left	347	365	61.9	351	60.4	351	59.2	363	60.7	360	59.2	362	61.3	358	60.2	365	63.5	352	59.5	362	63.3	359	60.9	E	1.03			
		933	940	Thru	117	95	33.1	106	45.3	121	42.4	110	42.7	131	49.2	117	39.5	115	42.7	122	42.5	99	44.7	109	38.2	113	42.0	D	0.96			
		933	940	Right	276	300	7.5	267	7.8	283	9.0	245	7.2	282	7.0	261	7.0	264	7.1	264	7.7	253	8.0	269	7.5	269	7.6	A	0.97			
		<b>OVERALL</b>					<b>740</b>	<b>760</b>	<b>36.8</b>	<b>724</b>	<b>38.8</b>	<b>755</b>	<b>37.7</b>	<b>718</b>	<b>39.7</b>	<b>773</b>	<b>38.4</b>	<b>740</b>	<b>38.7</b>	<b>737</b>	<b>38.5</b>	<b>751</b>	<b>40.5</b>	<b>704</b>	<b>38.9</b>	<b>740</b>	<b>39.3</b>	<b>740</b>	<b>38.7</b>	D	1.00	0.03%
	Westbound	944	940	Left	390	413	57.8	387	55.2	399	58.6	418	54.7	409	56.8	389	59.0	441	61.2	430	55.3	403	59.8	402	58.2	409	57.6	E	1.05			
		944	940	Thru	73	77	40.9	64	34.7	77	36.4	54	34.9	83	46.4	79	38.9	79	39.5	81	50.9	88	41.0	77	44.6	76	40.8	D	1.04			
		944	940	Right	527	537	26.5	504	24.8	557	25.8	516	25.9	543	24.6	541	28.1	510	24.7	505	25.9	510	24.9	539	25.7	526	25.7	C	1.00			
		<b>OVERALL</b>					<b>990</b>	<b>1027</b>	<b>40.2</b>	<b>955</b>	<b>37.8</b>	<b>1033</b>	<b>39.3</b>	<b>988</b>	<b>38.6</b>	<b>1035</b>	<b>39.1</b>	<b>1009</b>	<b>40.8</b>	<b>1030</b>	<b>41.5</b>	<b>1016</b>	<b>40.3</b>	<b>1001</b>	<b>40.4</b>	<b>1018</b>	<b>39.9</b>	<b>1011</b>	<b>39.8</b>	D	1.02	2.14%
	Northbound	941	940	Left	251	267	57.2	268	60.4	235	60.8	270	56.8	253	56.8	256	55.5	272	57.1	296	55.8	282	55.9	282	53.6	268	57.0	E	1.07			
		941	940	Thru	762	791	40.5	750	40.2	828	42.4	783	39.5	815	39.7	795	40.3	793	41.8	791	38.9	759	40.1	753	39.3	786	40.3	D	1.03			
		941	940	Right	619	589	10.7	620	10.7	580	10.7	590	10.9	574	11.4	592	11.0	572	10.8	556	12.5	600	12.5	616	11.8	589	11.3	B	0.95			
		<b>OVERALL</b>					<b>1632</b>	<b>1647</b>	<b>32.6</b>	<b>1638</b>	<b>32.3</b>	<b>1643</b>	<b>33.9</b>	<b>1643</b>	<b>32.1</b>	<b>1642</b>	<b>32.4</b>	<b>1643</b>	<b>32.1</b>	<b>1637</b>	<b>33.5</b>	<b>1643</b>	<b>33.0</b>	<b>1641</b>	<b>32.7</b>	<b>1651</b>	<b>31.5</b>	<b>1643</b>	<b>32.6</b>	C	1.01	0.66%
	Southbound	942	940	Left	597	626	53.0	600	51.9	606	48.5	618	51.0	629	51.0	611	53.2	646	50.2	621	51.2	672	53.0	602	52.1	623	51.5	D	1.04			
		942	940	Thru	569	571	32.2	568	30.2	575	29.3	542	28.8	555	31.8	543	27.8	555	29.2	580	30.0	524	31.7	563	31.3	558	30.2	C	0.98			
		942	940	Right	284	265	5.3	293	5.8	281	5.6	295	7.0	279	5.5	303	6.4	261	5.2	255	6.0	270	6.0	298	5.5	280	5.8	A	0.99			
		<b>OVERALL</b>					<b>1450</b>	<b>1462</b>	<b>36.2</b>	<b>1461</b>	<b>34.2</b>	<b>1462</b>	<b>32.7</b>	<b>1455</b>	<b>33.8</b>	<b>1463</b>	<b>35.0</b>	<b>1457</b>	<b>34.0</b>	<b>1462</b>	<b>34.2</b>	<b>1456</b>	<b>34.8</b>	<b>1466</b>	<b>36.7</b>	<b>1463</b>	<b>34.6</b>	<b>1461</b>	<b>34.6</b>	C	1.01	0.74%
<b>Intersection Total</b>					<b>4812</b>	<b>4896</b>	<b>35.9</b>	<b>4778</b>	<b>35.0</b>	<b>4893</b>	<b>35.2</b>	<b>4804</b>	<b>35.1</b>	<b>4913</b>	<b>35.6</b>	<b>4849</b>	<b>35.5</b>	<b>4866</b>	<b>36.2</b>	<b>4866</b>	<b>36.2</b>	<b>4812</b>	<b>36.4</b>	<b>4872</b>	<b>35.4</b>	<b>4855</b>	<b>35.6</b>	D	1.01			
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	963	970	Left	301	300	57.2	280	56.4	304	57.4	310	67.1	309	59.5	299	61.5	291	61.9	316	61.1	311	60.9	302	60.0	302	60.3	E	1.00			
		963	970	Thru	29	21	35.5	26	22.6	34	26.6	24	38.0	24	35.9	31	35.2	23	42.2	25	23.6	24	43.2	20	37.9	25	34.1	C	0.87			
		963	970	Right	284	289	8.5	265	9.8	287	10.3	260	8.0	277	9.6	267	9.0	264	7.5	274	9.4	243	8.8	275	8.3	270	8.9	A	0.95			
		<b>OVERALL</b>					<b>614</b>	<b>610</b>	<b>33.4</b>	<b>571</b>	<b>33.2</b>	<b>625</b>	<b>34.1</b>	<b>594</b>	<b>40.0</b>	<b>610</b>	<b>35.9</b>	<b>597</b>	<b>36.6</b>	<b>578</b>	<b>36.3</b>	<b>615</b>										

**Veterans Memorial Parkway Toll Justification Report  
2015 CORSIM Freeway Outputs - Alternative 1 AM Peak Hour**

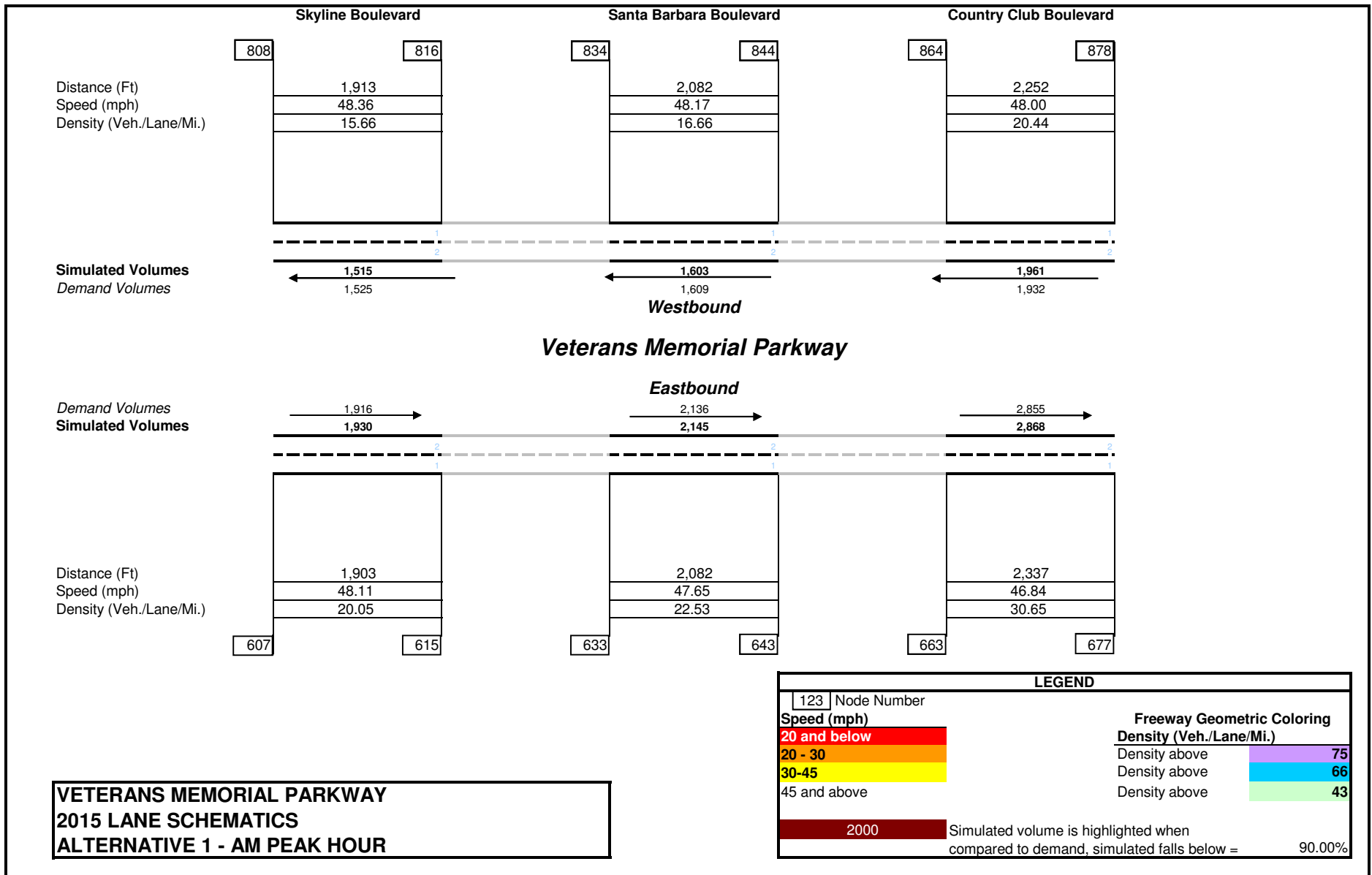
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,916	1,937	20.20	1,933	20.12	1,879	19.37	1,928	19.97	1,933	20.14	1,929	20.01	1,956	20.32	1,925	19.96	1,941	20.19		1,942
Santa Barbara Boulevard	Eastbound	Basic	633	643	2,136	2,115	22.32	2,173	22.92	2,068	21.61	2,164	22.72	2,102	22.19	2,150	22.49	2,202	23.12	2,104	22.09	2,196	23.01	2,173	22.85	2,145	22.53	C	0.41%
Country Club Boulevard	Eastbound	Basic	663	677	2,855	2,827	30.14	2,920	31.34	2,762	29.27	2,877	30.54	2,807	29.99	2,872	30.45	2,945	31.74	2,789	29.81	2,981	32.17	2,897	31.02	2,868	30.65	D	0.44%
Country Club Boulevard	Westbound	Basic	878	864	1,932	1,972	20.54	1,953	20.30	1,920	19.96	1,954	20.31	1,916	20.03	1,956	20.45	1,995	20.79	1,974	20.62	1,993	20.85	1,981	20.61	1,961	20.44	C	1.52%
Santa Barbara Boulevard	Westbound	Basic	844	834	1,609	1,591	16.49	1,630	17.08	1,536	15.95	1,613	16.73	1,546	16.05	1,622	16.82	1,622	16.81	1,633	17.00	1,617	16.76	1,622	16.88	1,603	16.66	C	-0.36%
Skyline Boulevard	Westbound	Basic	816	808	1,525	1,470	15.17	1,553	16.09	1,428	14.80	1,530	15.77	1,432	14.77	1,537	15.89	1,518	15.71	1,524	15.76	1,565	16.24	1,590	16.44	1,515	15.66	B	-0.68%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	47.82	48.05	48.39	48.23	47.96	48.26	48.21	48.14	48.07	47.95	48.11
Santa Barbara Boulevard	Eastbound	Basic	633	643	47.47	47.45	48.00	47.75	47.54	47.86	47.58	47.75	47.66	47.47	47.65
Country Club Boulevard	Eastbound	Basic	663	677	46.92	46.70	47.20	46.98	46.78	47.09	46.68	46.87	46.49	46.66	46.84
Country Club Boulevard	Westbound	Basic	878	864	47.94	48.09	48.18	48.15	47.82	48.04	48.04	47.96	47.80	47.98	48.00
Santa Barbara Boulevard	Westbound	Basic	844	834	48.23	47.87	48.31	48.22	48.16	48.20	48.30	47.97	48.16	48.25	48.17
Skyline Boulevard	Westbound	Basic	816	808	48.46	48.27	48.35	48.44	48.63	48.22	48.44	48.38	48.07	48.30	48.36



**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report  
2015 Intersection Level of Service  
Alternative 1 - PM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	PM PK VOLUME	CORSIM Run 1		CORSIM Run 2		CORSIM Run 3		CORSIM Run 4		CORSIM Run 5		CORSIM Run 6		CORSIM Run 7		CORSIM Run 8		CORSIM Run 9		CORSIM Run 10		AVERAGE			CORSIM /Count (0.90<x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)	
		A	B			Seed #	2,674	Seed #	26,905	Seed #	25,840	Seed #	18,093	Seed #	8,764	Seed #	5,077	Seed #	1,560	Seed #	4,578	Seed #	26,943	Seed #	31,802	Volume	Delay (Sec/Veh)	LOS				
		Volume	Delay (Sec/Veh)			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume				Delay (Sec/Veh)
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	907	910	Left	397	399	64.9	344	68.1	414	70.1	428	65.0	414	372	69.1	380	69.7	408	67.6	402	66.4	423	68.1	398	67.9	E	1.00				
		907	910	Thru	26	24	30.7	31	31.2	27	47.6	16	46.9	22	48.5	36	32.7	20	48.5	26	53.0	22	45.3	22	41.5	25	42.6	D	0.95			
		907	910	Right	96	78	8.7	83	7.6	110	9.4	91	9.4	81	8.3	101	11.4	92	9.2	83	7.6	104	9.8	99	8.3	92	9.0	A	0.96			
		<b>OVERALL</b>					519	501	54.5	458	54.7	551	56.9	535	55.0	517	59.7	509	55.1	492	57.5	517	57.3	528	54.4	544	56.1	515	56.1	E	0.99	-0.73%
	Westbound	916	910	Left	647	626	59.5	620	64.3	700	62.9	654	58.6	619	61.0	669	62.4	630	64.4	643	64.0	664	68.8	648	63.2	647	62.9	E	1.00			
		916	910	Thru	19	13	35.1	15	33.0	16	31.6	17	29.2	21	37.5	11	48.9	9	40.2	19	25.7	15	44.8	23	31.1	16	35.7	D	<b>0.84</b>			
		916	910	Right	280	283	11.1	275	7.9	278	8.5	260	9.3	280	8.5	254	8.4	276	9.3	280	9.2	281	9.1	276	9.2	274	9.1	A	0.98			
		<b>OVERALL</b>					946	922	44.3	910	46.7	994	47.2	931	44.3	920	44.5	934	47.6	915	47.5	942	46.9	960	51.0	947	46.7	938	46.7	D	0.99	-0.90%
	Northbound	911	910	Left	179	179	72.5	181	65.5	189	71.4	167	79.1	180	76.9	188	70.4	166	80.5	189	70.0	176	75.1	197	72.6	181	73.4	E	1.01			
		911	910	Thru	376	391	44.2	367	40.4	381	41.5	399	41.9	355	41.7	372	45.1	389	39.6	390	43.9	375	41.9	370	41.5	379	42.2	D	1.01			
		911	910	Right	468	443	6.1	478	5.6	455	5.5	457	6.0	482	6.1	456	5.8	470	6.1	437	6.2	471	5.7	451	5.9	460	5.9	A	0.98			
		<b>OVERALL</b>					1023	1013	32.5	1026	28.6	1025	31.0	1023	31.9	1017	31.0	1016	32.1	1025	30.8	1016	32.5	1022	30.9	1018	31.7	1020	31.3	C	1.00	-0.28%
	Southbound	912	910	Left	209	243	73.5	207	68.4	196	74.5	211	69.4	211	67.6	222	71.6	210	78.2	229	73.0	181	73.0	210	72.0	212	72.1	E	1.01			
		912	910	Thru	390	370	41.5	385	43.6	398	42.0	396	42.4	387	43.2	370	43.2	382	42.4	372	41.4	417	43.8	389	42.8	387	42.6	D	0.99			
		912	910	Right	97	77	3.7	101	3.9	96	3.7	81	3.5	89	4.2	93	3.6	93	4.2	93	3.6	88	3.7	90	3.4	90	3.8	A	0.93			
		<b>OVERALL</b>					696	690	48.6	693	45.2	690	45.9	688	46.1	687	45.6	685	47.0	685	48.2	694	46.7	686	46.4	689	46.6	689	46.6	D	0.99	-1.05%
	<b>Intersection Total</b>					<b>3184</b>	<b>3126</b>	<b>43.1</b>	<b>3087</b>	<b>41.5</b>	<b>3260</b>	<b>43.5</b>	<b>3177</b>	<b>42.5</b>	<b>3141</b>	<b>42.9</b>	<b>3144</b>	<b>43.7</b>	<b>3117</b>	<b>43.8</b>	<b>3169</b>	<b>44.0</b>	<b>3196</b>	<b>44.1</b>	<b>3198</b>	<b>43.5</b>	<b>3162</b>	<b>43.3</b>	<b>D</b>	0.99		
	Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	933	940	Left	284	282	69.7	302	66.2	286	74.0	275	72.1	283	72.5	297	70.7	300	72.3	317	74.2	283	72.1	288	69.9	291	71.4	E	1.03		
			933	940	Thru	88	82	40.3	91	49.2	90	48.2	99	45.1	82	44.3	83	39.8	69	55.3	89	47.7	92	42.1	85	49.6	86	46.2	D	0.98		
			933	940	Right	251	247	7.8	267	8.9	253	8.2	262	8.2	271	7.5	250	7.1	218	6.9	227	7.6	262	8.8	249	7.8	251	7.9	A	1.00		
			<b>OVERALL</b>					623	611	40.8	660	40.7	629	43.8	636	41.6	636	41.2	630	41.4	587	46.0	633	46.6	637	41.7	622	42.3	628	42.6	D	1.01
Westbound		944	940	Left	679	629	63.2	658	63.1	731	59.8	701	61.1	680	60.6	690	63.7	684	63.4	671	64.7	700	60.8	679	61.3	682	62.2	E	1.00			
		944	940	Thru	96	85	42.4	100	38.5	83	35.7	106	39.0	102	35.5	104	42.2	88	34.5	89	36.5	97	36.2	88	33.7	94	37.4	D	0.98			
		944	940	Right	427	414	23.8	409	24.7	396	21.9	381	22.9	418	22.5	393	24.6	384	23.1	420	22.7	406	24.8	403	21.9	402	23.3	C	0.94			
		<b>OVERALL</b>					1202	1128	47.2	1167	47.5	1210	45.8	1188	46.9	1200	45.2	1187	48.9	1156	47.8	1180	47.6	1203	46.7	1170	45.7	1179	46.9	D	0.98	-1.92%
Northbound		941	940	Left	276	272	67.3	272	71.6	283	70.5	255	72.0	280	69.2	283	71.2	287	69.7	315	68.4	254	71.1	293	63.7	279	69.5	E	1.01			
		941	940	Thru	569	582	50.5	577	48.1	568	49.4	602	50.1	557	51.2	582	53.2	569	51.2	549	52.4	607	50.4	578	52.7	577	50.9	D	1.01			
		941	940	Right	390	390	7.8	387	7.8	388	7.2	378	7.6	397	7.7	372	7.7	383	7.9	367	8.2	380	7.9	367	7.0	381	7.7	A	0.98			
		<b>OVERALL</b>					1235	1244	40.8	1236	40.7	1239	41.0	1235	41.6	1234	41.3	1237	43.6	1239	42.1	1231	43.3	1241	41.6	1238	41.8	1237	41.8	D	1.00	0.19%
Southbound		942	940	Left	527	514	65.7	501	66.9	550	65.9	531	69.4	525	63.9	548	65.5	569	64.3	577	67.1	496	65.4	550	66.8	536	66.1	E	1.02			
		942	940	Thru	762	762	43.1	784	45.0	755	42.6	801	43.9	788	44.6	766	44.2	728	42.8	733	44.3	803	40.8	776	43.9	770	43.5	D	1.01			
		942	940	Right	347	360	6.9	358	6.2	337	6.5	312	6.6	331	6.2	328	6.8	345	6.7	326	6.4	349	6.2	323	6.6	337	6.5	A	0.97			
		<b>OVERALL</b>					1636	1636	42.3	1643	43.2	1642	43.0	1644	45.1	1644	43.0	1642	43.8	1642	42.7	1636	44.8	1648	40.9	1649	44.2	1643	43.3	D	1.00	0.40%
<b>Intersection Total</b>					<b>4696</b>	<b>4619</b>	<b>42.9</b>	<b>4706</b>	<b>43.3</b>	<b>4720</b>	<b>43.3</b>	<b>4703</b>	<b>44.1</b>	<b>4714</b>	<b>42.9</b>	<b>4696</b>	<b>44.7</b>	<b>4624</b>	<b>44.2</b>	<b>4680</b>	<b>45.4</b>	<b>4729</b>	<b>42.7</b>	<b>4679</b>	<b>43.7</b>	<b>4687</b>	<b>43.7</b>	<b>D</b>	1.00			
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)		Eastbound	963	970	Left	318	308	72.8	320	72.3	339	72.5	328	70.5	300	77.8	325	70.3	341	73.8	345	75.8	325	73.1	329	72.2	326	73.1	E	1.03		
			963	970	Thru	21	10	28.5	22	42.2	23	41.2	25	26.2	16	20.1	20	21.4	14	35.5	24	34.9	11	36.7	15	29.2	18	31.6	C	<b>0.86</b>		
			963	970	Right	209	190	9.3	205	7.3	216	8.4	208	10.5	232	8.9	203	8.7	191	7.8	206	7.6	224	8.3	216	8.6	209	8.6	A	1.00		
			<b>OVERALL</b>					548	508	48.1	547	46.8	578	47.3	561	46.3	548	46.9	548	45.7	546	49.8	575	49.7	560	46.4	560	46.5	553	47.4	D	1.01
	Westbound	978	970	Left	305	292	70.2	303	67.5	281	69.8	326	67.6	296	71.3	304	67.7	345	68.5	306	71.0	301	68.4	312	69.8	307	69.2	E	1.01			
		978	970	Thru	182	182	36.7	193	39.8	193	40.1	207	39.2	183	35.0	186	42.3	179	42.2	196	43.8	181	33.9	180	36.2	188	38.9	D	1.03			
		978	970	Right	398	379	12.3	409	11.2	390	13.1	389	11.3	387	11.5	367	10.7	395	12.7													

**Veterans Memorial Parkway Toll Justification Report  
2015 CORSIM Freeway Outputs - Alternative 1 PM Peak Hour**

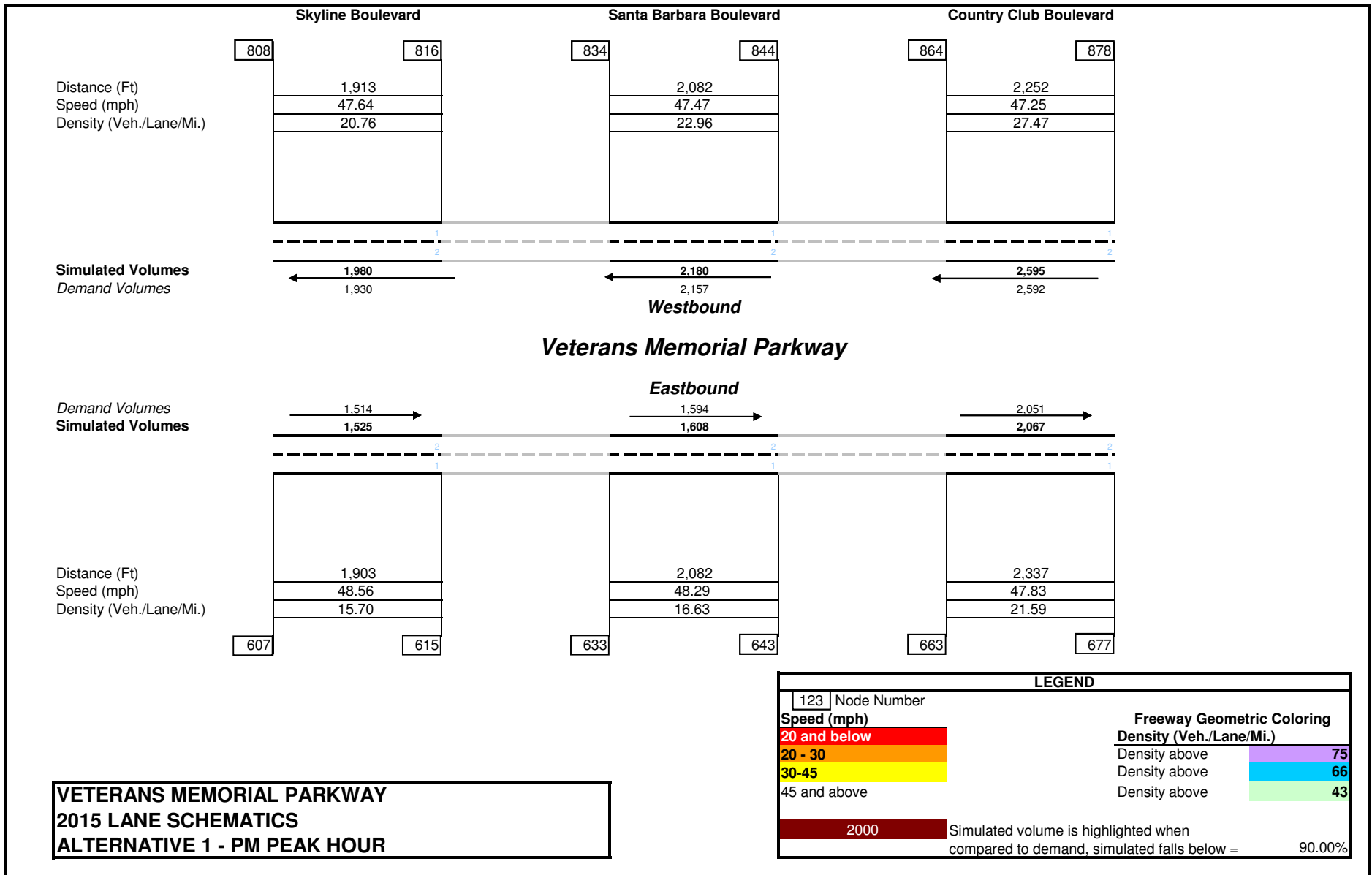
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,514	1,545	15.88	1,583	16.33	1,486	15.32	1,504	15.46	1,518	15.61	1,532	15.82	1,552	15.94	1,526	15.72	1,505	15.42		1,496
Santa Barbara Boulevard	Eastbound	Basic	633	643	1,594	1,649	17.09	1,652	17.01	1,562	16.07	1,561	16.13	1,622	16.79	1,625	16.82	1,666	17.38	1,595	16.51	1,563	16.13	1,581	16.37	1,608	16.63	C	0.85%
Country Club Boulevard	Eastbound	Basic	663	677	2,051	2,134	22.26	2,100	21.92	2,020	21.06	2,019	20.93	2,068	21.63	2,074	21.77	2,164	22.71	2,071	21.60	1,986	20.77	2,030	21.27	2,067	21.59	C	0.76%
Country Club Boulevard	Westbound	Basic	878	864	2,592	2,624	27.90	2,582	27.40	2,610	27.67	2,559	27.12	2,609	27.52	2,624	27.78	2,564	27.03	2,594	27.42	2,617	27.71	2,569	27.21	2,595	27.47	D	0.12%
Santa Barbara Boulevard	Westbound	Basic	844	834	2,157	2,248	23.93	2,191	23.12	2,181	22.90	2,129	22.33	2,181	22.76	2,205	23.32	2,153	22.72	2,186	23.03	2,168	22.73	2,156	22.71	2,180	22.96	C	1.06%
Skyline Boulevard	Westbound	Basic	816	808	1,930	2,071	21.81	2,043	21.61	1,932	20.18	1,909	19.82	1,990	20.85	2,012	21.17	1,979	20.77	2,005	21.01	1,910	20.03	1,946	20.35	1,980	20.76	C	2.58%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	48.54	48.43	48.62	48.63	48.68	48.40	48.64	48.51	48.72	48.46	48.56
Santa Barbara Boulevard	Eastbound	Basic	633	643	48.23	48.40	48.47	48.41	48.18	48.16	48.16	48.30	48.41	48.13	48.29
Country Club Boulevard	Eastbound	Basic	663	677	47.78	47.91	47.82	48.17	47.85	47.72	47.67	47.78	47.92	47.75	47.83
Country Club Boulevard	Westbound	Basic	878	864	47.12	47.10	47.24	47.20	47.39	47.22	47.36	47.31	47.29	47.31	47.25
Santa Barbara Boulevard	Westbound	Basic	844	834	47.06	47.30	47.71	47.60	47.79	47.27	47.38	47.46	47.57	47.56	47.47
Skyline Boulevard	Westbound	Basic	816	808	47.26	47.41	47.92	48.07	47.58	47.55	47.70	47.60	47.57	47.70	47.64



**Veterans Memorial Parkway/Santa Barbara Boulevard Intersection Report**  
**2035 Intersection Level of Service**  
**Alternative 1 - AM Peak Hour**

Intersection	Approach	CORSIM Nodes		Movement	AM PK VOLUME	CORSIM Run 1 Seed # 7,390		CORSIM Run 2 Seed # 14,673		CORSIM Run 3 Seed # 32,570		CORSIM Run 4 Seed # 25,268		CORSIM Run 5 Seed # 28,296		CORSIM Run 6 Seed # 6,994		CORSIM Run 7 Seed # 7,808		CORSIM Run 8 Seed # 22,745		CORSIM Run 9 Seed # 11,988		CORSIM Run 10 Seed # 27,121		AVERAGE			CORSIM /Count (0.90-x<1.10)	Volume Percent Difference on Links	GEH Statistic (x<5.0)
		A	B			Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	Volume	Delay (Sec/Veh)	LOS			
																										Volume	Delay (Sec/Veh)	LOS			
Veterans Memorial Parkway/ Skyline Boulevard (Signalized)	Eastbound	907	910	Left	372	346	59.3	362	58.5	341	54.3	338	53.6	365	57.1	351	54.0	342	55.1	369	55.9	368	54.8	369	57.4	355	56.0	E	0.95		
		907	910	Thru	42	30	43.2	25	54.1	32	34.9	43	37.7	48	38.9	39	38.1	40	35.1	37	35.8	31	44.8	37	40.8	36	40.3	D	0.86		
		907	910	Right	79	68	8.7	88	8.9	80	9.0	74	8.2	78	9.0	83	8.9	81	8.0	73	8.6	81	7.9	92	8.5	80	8.6	A	1.01		
		OVERALL				493	444	50.4	475	49.1	453	44.9	455	44.7	491	47.7	473	44.8	463	45.1	479	47.2	480	46.3	498	47.1	471	46.7	D	0.96	-4.44%
	Westbound	916	910	Left	672	662	51.3	643	55.9	698	52.5	659	51.8	726	47.8	686	54.7	683	53.3	690	52.0	661	56.7	634	54.5	674	53.1	D	1.00		
		916	910	Thru	19	18	29.2	24	26.1	18	31.8	17	29.4	18	20.8	16	33.1	15	33.9	19	31.0	21	26.4	23	22.7	19	28.4	C	0.99		
		916	910	Right	244	244	8.4	248	6.9	237	8.6	251	8.5	242	7.7	246	7.6	231	9.1	237	7.1	243	7.9	253	8.2	243	8.0	A	1.00		
		OVERALL				935	924	39.5	915	41.9	953	41.2	927	39.7	986	37.5	948	42.1	929	42.0	946	40.3	925	43.2	910	40.8	936	40.8	D	1.00	0.14%
	Northbound	911	910	Left	133	130	58.3	135	58.2	142	60.8	129	52.2	140	55.3	138	56.6	143	63.0	133	59.3	127	58.8	156	61.1	137	58.4	E	1.03		
		911	910	Thru	427	455	43.3	433	39.3	450	41.5	437	42.3	433	40.0	441	40.9	454	43.1	434	40.0	419	41.4	395	41.6	435	41.3	D	1.02		
		911	910	Right	597	580	8.5	596	8.9	562	8.4	597	8.8	588	8.0	583	9.2	569	8.4	595	8.5	616	8.5	607	8.9	589	8.6	A	0.99		
		OVERALL				1157	1165	27.7	1164	25.9	1154	27.8	1163	26.2	1161	25.7	1162	26.9	1166	28.6	1162	26.1	1162	25.9	1158	27.1	1162	26.8	C	1.00	0.41%
	Southbound	912	910	Left	402	428	54.1	400	51.3	422	56.1	392	56.6	403	53.3	392	51.5	431	50.7	390	55.6	399	54.4	394	54.0	405	53.7	D	1.01		
		912	910	Thru	438	407	33.7	453	38.9	434	33.9	467	37.1	416	35.6	477	36.5	425	32.4	456	36.3	452	34.2	431	34.1	442	35.3	D	1.01		
		912	910	Right	347	358	5.0	339	5.3	334	4.9	338	4.6	375	4.5	323	4.9	342	4.9	360	5.1	346	5.0	365	5.0	348	4.9	A	1.00		
		OVERALL				1187	1193	32.4	1192	33.5	1190	33.7	1197	34.3	1194	31.8	1192	32.9	1198	31.1	1206	33.2	1197	32.5	1190	31.8	1195	32.7	C	1.01	0.67%
<b>Intersection Total</b>					<b>3772</b>	<b>3726</b>	<b>34.8</b>	<b>3746</b>	<b>35.2</b>	<b>3750</b>	<b>35.1</b>	<b>3742</b>	<b>34.4</b>	<b>3832</b>	<b>33.4</b>	<b>3775</b>	<b>34.8</b>	<b>3756</b>	<b>34.7</b>	<b>3793</b>	<b>34.6</b>	<b>3764</b>	<b>34.8</b>	<b>3756</b>	<b>34.5</b>	<b>3764</b>	<b>34.6</b>	<b>C</b>	1.00		
Veterans Memorial Parkway/ Santa Barbara Boulevard (Signalized)	Eastbound	933	940	Left	414	414	57.0	420	57.6	422	58.9	425	56.2	432	59.4	430	58.5	443	61.0	413	59.5	434	58.7	414	55.7	425	58.3	E	1.03		
		933	940	Thru	135	103	42.7	124	48.1	123	38.2	111	45.7	153	45.8	118	47.6	111	39.7	143	43.5	125	44.9	133	44.6	124	44.1	D	0.92		
		933	940	Right	387	383	9.5	372	9.2	357	9.5	378	9.6	361	8.5	370	11.1	363	9.4	384	9.2	385	10.2	419	12.1	377	9.8	A	0.97		
		OVERALL				936	900	35.2	916	36.7	902	36.5	914	35.6	946	37.8	918	38.0	917	38.0	940	36.5	944	37.1	966	35.3	926	36.7	D	0.99	-1.04%
	Westbound	944	940	Left	561	562	58.6	566	56.5	575	59.9	582	58.0	593	60.5	554	55.4	559	54.1	557	58.3	559	59.8	552	53.8	566	57.3	E	1.01		
		944	940	Thru	93	70	39.8	87	37.0	78	34.8	82	40.6	91	33.7	94	30.3	71	41.1	95	33.9	82	38.1	77	33.0	83	36.2	D	0.89		
		944	940	Right	585	572	23.5	576	24.8	544	25.3	541	21.9	590	26.5	563	26.2	574	22.4	565	23.9	584	24.3	578	23.2	569	24.2	C	0.97		
		OVERALL				1239	1204	40.8	1229	40.3	1197	42.5	1205	40.6	1274	42.9	1211	38.9	1204	38.2	1217	40.4	1225	41.4	1207	37.8	1217	40.4	D	0.98	-1.75%
	Northbound	941	940	Left	387	386	52.5	394	52.7	410	55.7	402	56.2	395	52.9	393	53.8	411	56.0	389	51.4	378	55.2	391	53.2	395	54.0	D	1.02		
		941	940	Thru	949	962	46.5	974	45.7	946	45.3	960	48.5	949	48.2	984	46.8	991	48.1	952	44.4	989	48.2	938	45.8	965	46.8	D	1.02		
		941	940	Right	626	626	12.4	603	13.1	624	14.5	615	12.8	633	15.0	599	12.7	572	13.1	640	13.7	603	11.7	647	14.1	616	13.3	B	0.98		
		OVERALL				1962	1974	36.9	1971	37.1	1980	37.7	1977	39.0	1977	38.5	1976	37.9	1974	39.6	1981	35.8	1970	38.4	1976	36.9	1976	37.8	D	1.01	0.69%
	Southbound	942	940	Left	605	663	51.9	609	53.1	620	50.6	627	51.2	624	49.5	607	51.1	638	50.7	608	50.8	589	50.9	595	49.8	618	51.0	D	1.02		
		942	940	Thru	710	685	38.0	739	38.5	707	38.1	730	38.4	685	37.7	740	37.5	726	40.7	716	37.6	773	38.0	731	34.9	723	37.9	D	1.02		
		942	940	Right	308	288	6.5	284	7.1	305	7.0	280	7.2	327	7.1	286	6.6	271	6.0	310	6.9	275	6.0	313	7.6	294	6.8	A	0.95		
		OVERALL				1623	1636	38.1	1632	38.5	1632	37.1	1637	37.9	1636	36.1	1633	37.1	1635	38.8	1634	36.7	1637	37.3	1639	35.1	1635	37.3	D	1.01	0.75%
<b>Intersection Total</b>					<b>5760</b>	<b>5714</b>	<b>37.8</b>	<b>5748</b>	<b>38.1</b>	<b>5711</b>	<b>38.4</b>	<b>5733</b>	<b>38.5</b>	<b>5833</b>	<b>38.7</b>	<b>5738</b>	<b>37.9</b>	<b>5730</b>	<b>38.8</b>	<b>5772</b>	<b>37.2</b>	<b>5776</b>	<b>38.5</b>	<b>5788</b>	<b>36.3</b>	<b>5754</b>	<b>38.0</b>	<b>D</b>	1.00		
Veterans Memorial Parkway/ Country Club Boulevard (Signalized)	Eastbound	963	970	Left	311	313	60.5	320	65.3	327	64.2	306	61.4	318	58.8	308	60.8	308	60.3	292	58.6	299	59.2	309	57.0	310	60.6	E	1.00		
		963	970	Thru	34	27	35.0	34	34.0	27	23.4	26	35.6	29	38.7	29	34.3	23	33.4	35	35.9	33	33.6	39	40.5	30	34.4	C	0.89		
		963	970	Right	308	282	9.1	309	10.6	296	9.5	298	10.7	287	9.3	284	9.8	310	10.3	291	11.4	332	10.5	323	9.9	301	10.1	B	0.98		
		OVERALL				653	622	36.1	663	38.2	650	37.6	630	36.4	634	35.5	621	36.2	641	35.2	618	35.0	664	33.6	671	33.3	641	35.7	D	0.98	-1.78%
	Westbound	978	970	Left	230	215	54.4	213	60.0	233	60.4	243	64.2	224	59.7	246	59.3	215	56.2	223	58.0	228	62.9	218	59.0	226	59.4	E	0.98		
		978	970	Thru	175	176	37.5	172	43.1	168	42.5	148	40.3	152	40.9	163	42.9	173	39.5	161	41.3	192	35.7	191	42.2	170	40.6	D	0.97		
		978	970	Right	431	399	14.9	410	17.3	405	15.9	406	18.3	396	17.2	403	17.0	443	19.4	427	16.7	452	19.3	448	15.8	419	17.2	B			



**Veterans Memorial Parkway Toll Justification Report**  
**2035 CORSIM Freeway Outputs - Alternative 1 AM Peak Hour**

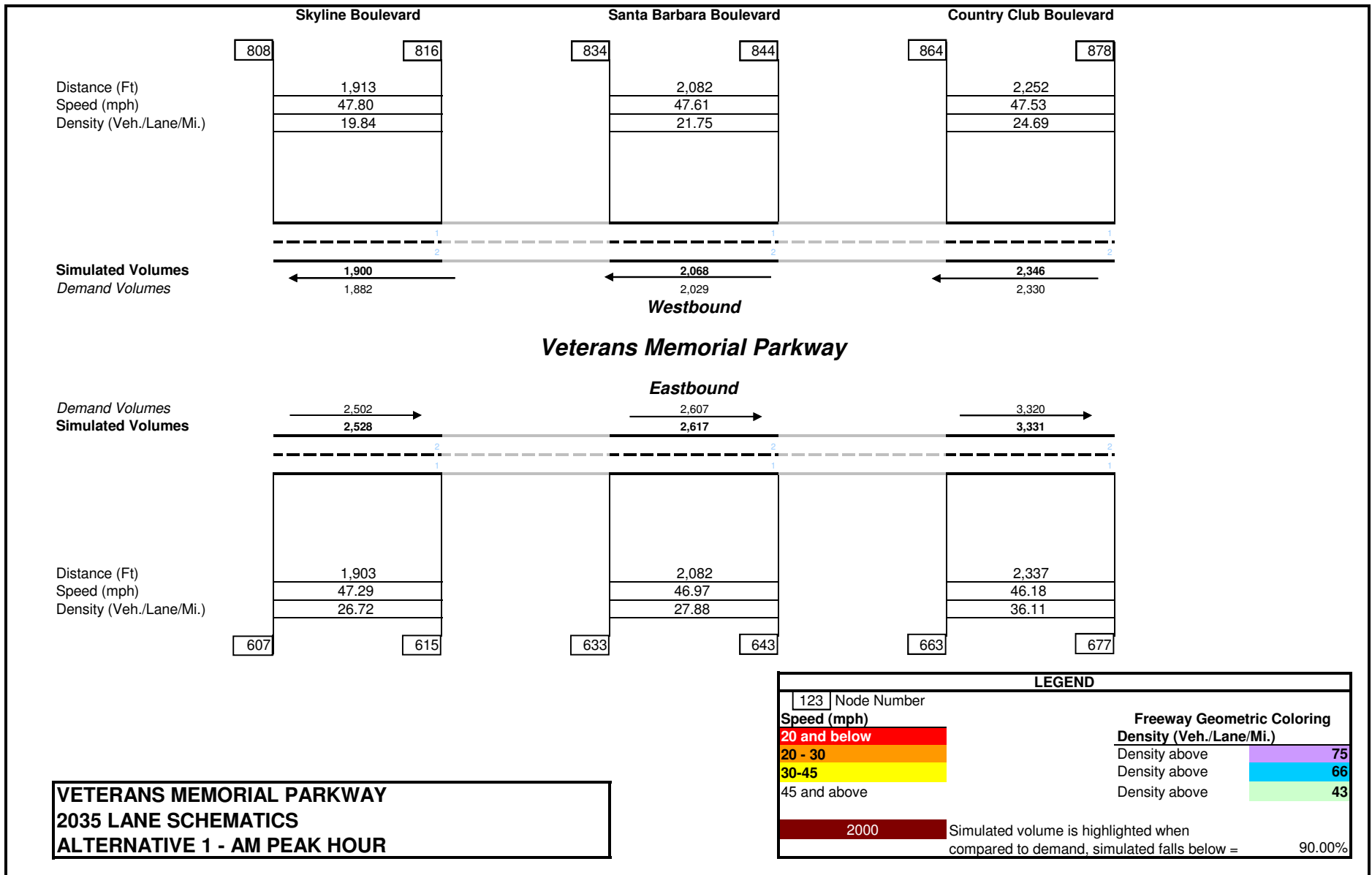
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	2,502	2,555	27.07	2,514	26.63	2,555	27.02	2,549	27.04	2,502	26.44	2,526	26.80	2,528	26.66	2,526	26.56	2,519	26.57		2,507
Santa Barbara Boulevard	Eastbound	Basic	633	643	2,607	2,670	28.70	2,616	27.82	2,651	28.30	2,652	28.23	2,590	27.54	2,618	27.76	2,647	28.18	2,577	27.28	2,594	27.75	2,558	27.22	2,617	27.88	D	0.40%
Country Club Boulevard	Eastbound	Basic	663	677	3,320	3,432	37.39	3,266	35.40	3,366	36.43	3,359	36.53	3,369	36.54	3,390	36.06	3,320	35.88	3,331	35.96	3,264	35.40	3,268	35.51	3,331	36.11	E	0.32%
Country Club Boulevard	Westbound	Basic	878	864	2,330	2,370	24.89	2,369	24.91	2,357	24.79	2,357	24.92	2,389	25.17	2,354	24.77	2,327	24.53	2,351	24.61	2,285	24.03	2,303	24.26	2,346	24.69	D	0.70%
Santa Barbara Boulevard	Westbound	Basic	844	834	2,029	2,121	22.41	2,068	21.75	2,095	22.16	2,070	21.78	2,072	21.71	2,049	21.51	2,075	21.79	2,068	21.72	1,989	20.89	2,074	21.77	2,068	21.75	C	1.93%
Skyline Boulevard	Westbound	Basic	816	808	1,882	1,955	20.44	1,908	19.85	1,931	20.17	1,886	19.82	1,902	19.86	1,859	19.32	1,889	19.71	1,915	20.00	1,827	19.10	1,925	20.16	1,900	19.84	C	0.94%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	47.23	47.33	47.16	47.13	47.38	47.15	47.42	47.44	47.38	47.28	47.29
Santa Barbara Boulevard	Eastbound	Basic	633	643	46.70	47.01	46.89	46.91	47.06	47.07	46.95	47.19	46.93	47.01	46.97
Country Club Boulevard	Eastbound	Basic	663	677	46.01	46.25	46.20	46.01	46.28	46.18	46.28	46.36	46.06	46.16	46.18
Country Club Boulevard	Westbound	Basic	878	864	47.56	47.52	47.52	47.32	47.51	47.49	47.51	47.74	47.63	47.52	47.53
Santa Barbara Boulevard	Westbound	Basic	844	834	47.51	47.64	47.38	47.46	47.66	47.67	47.63	47.70	47.66	47.76	47.61
Skyline Boulevard	Westbound	Basic	816	808	47.65	48.06	47.69	47.66	47.79	47.95	47.82	47.85	47.70	47.86	47.80





**Veterans Memorial Parkway Toll Justification Report**  
**2035 CORSIM Freeway Outputs - Alternative 1 PM Peak Hour**

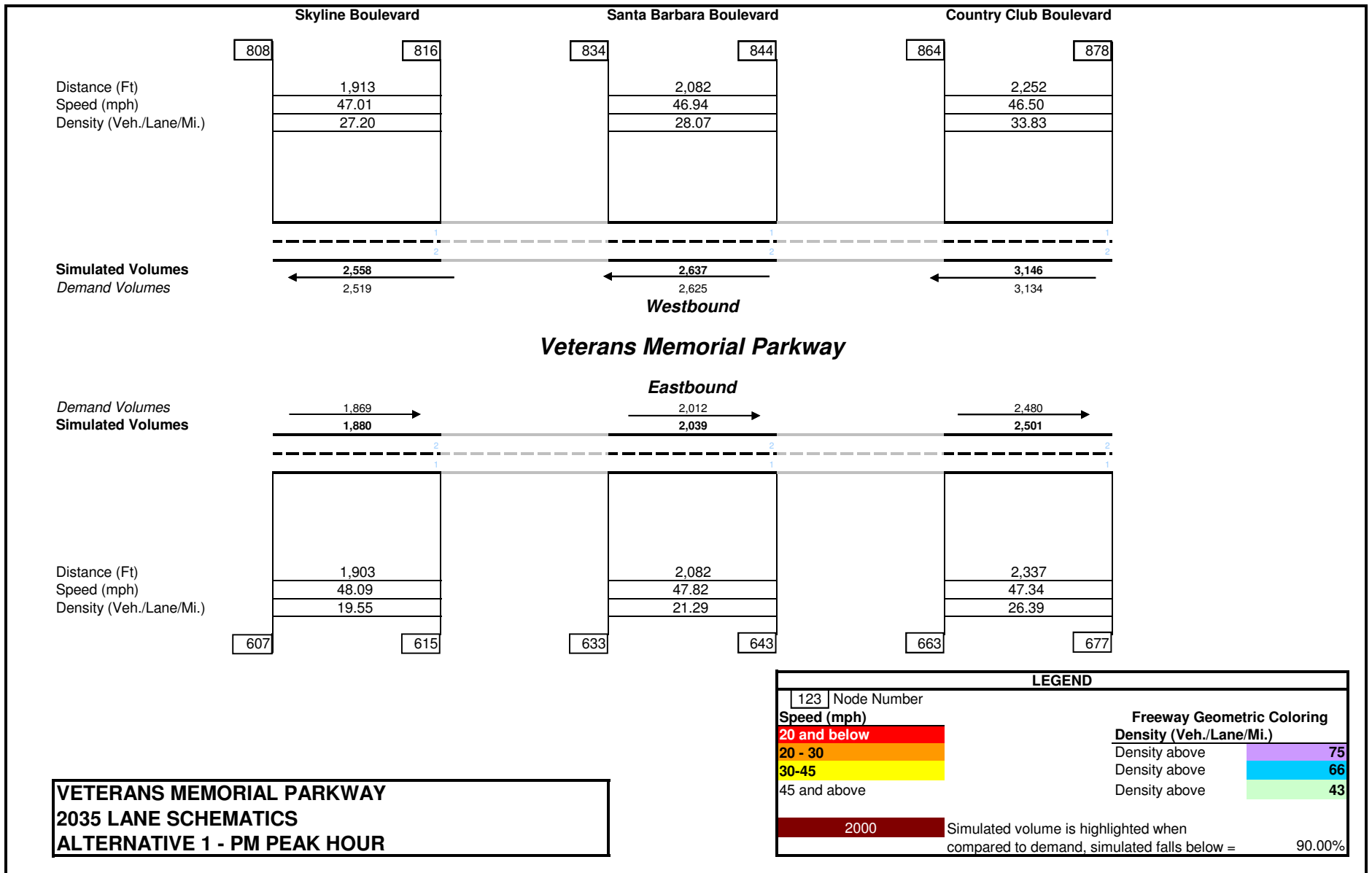
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,869	1,878	19.53	1,887	19.65	1,856	19.22	1,873	19.48	1,883	19.56	1,890	19.65	1,881	19.63	1,887	19.62	1,903	19.76		1,865
Santa Barbara Boulevard	Eastbound	Basic	633	643	2,012	2,045	21.26	2,028	21.23	1,999	20.87	2,019	21.07	2,067	21.61	2,046	21.29	2,041	21.22	2,051	21.42	2,004	21.02	2,093	21.92	2,039	21.29	C	1.36%
Country Club Boulevard	Eastbound	Basic	663	677	2,480	2,501	26.27	2,514	26.46	2,453	25.91	2,506	26.57	2,522	26.57	2,532	26.64	2,507	26.46	2,497	26.31	2,429	25.66	2,550	27.08	2,501	26.39	D	0.85%
Country Club Boulevard	Westbound	Basic	878	864	3,134	3,149	33.81	3,139	33.68	3,114	33.59	3,163	33.92	3,175	34.22	3,193	34.34	3,132	33.77	3,104	33.41	3,106	33.30	3,181	34.24	3,146	33.83	D	0.37%
Santa Barbara Boulevard	Westbound	Basic	844	834	2,625	2,598	27.52	2,638	28.02	2,612	27.76	2,662	28.32	2,699	28.86	2,678	28.56	2,662	28.32	2,603	27.80	2,579	27.35	2,634	28.22	2,637	28.07	D	0.44%
Skyline Boulevard	Westbound	Basic	816	808	2,519	2,457	26.02	2,581	27.31	2,542	27.08	2,572	27.43	2,609	27.74	2,607	27.69	2,581	27.57	2,558	27.15	2,463	26.21	2,605	27.81	2,558	27.20	D	1.53%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
			Skyline Boulevard	Eastbound											
Santa Barbara Boulevard	Eastbound	Basic	633	643	47.89	47.85	47.84	47.79	47.80	47.82	47.92	47.91	47.73	47.62	47.82
Country Club Boulevard	Eastbound	Basic	663	677	47.54	47.43	47.40	47.19	47.27	47.46	47.32	47.40	47.32	47.13	47.34
Country Club Boulevard	Westbound	Basic	878	864	46.50	46.62	46.44	46.63	46.40	46.42	46.44	46.45	46.62	46.47	46.50
Santa Barbara Boulevard	Westbound	Basic	844	834	46.98	47.17	47.00	47.01	46.69	46.96	46.93	46.89	46.95	46.84	46.94
Skyline Boulevard	Westbound	Basic	816	808	47.21	47.14	46.99	46.94	46.86	46.91	46.98	47.09	47.14	46.78	47.01



LEGEND	
123	Node Number
<b>Speed (mph)</b>	
20 and below	Freeway Geometric Coloring
20 - 30	Density (Veh./Lane/Mi.)
30-45	Density above 75
45 and above	Density above 66
2000	Density above 43
Simulated volume is highlighted when compared to demand, simulated falls below = 90.00%	

***APPENDIX J***  
***ALTERNATIVE 2 CORSIM RESULTS***

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**Veterans Memorial Parkway Toll Justification Report  
2015 CORSIM Freeway Outputs - Alternative 2 AM Peak Hour**

**Level of Service**

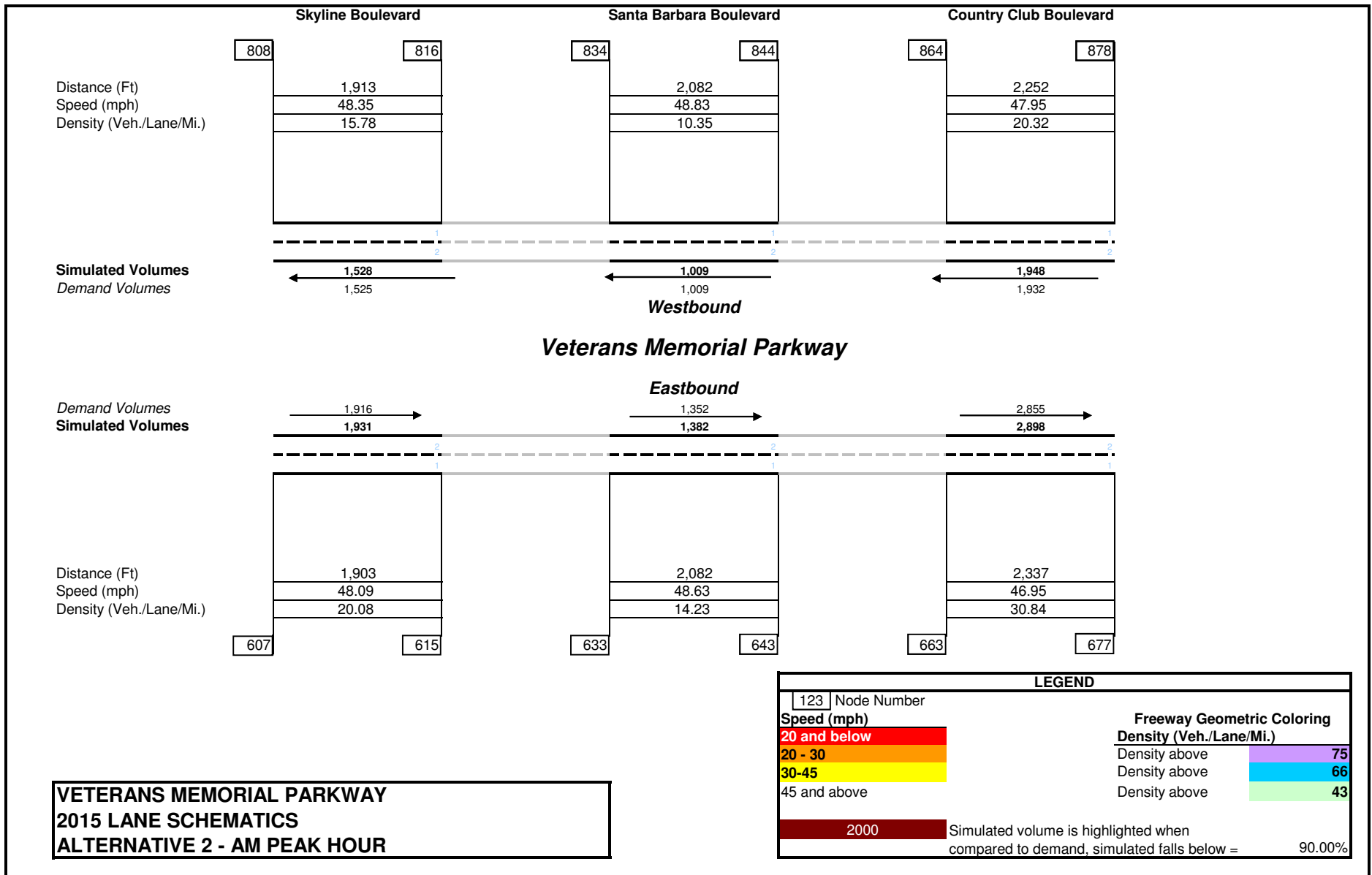
Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,916	1,909	19.81	1,936	20.03	1,942	20.19	1,924	19.99	1,947	20.27	1,914	19.94	1,920	20.01	1,949	20.30	1,927	20.04		1,938
Santa Barbara Boulevard	Eastbound	Basic	633	643	1,352	1,375	14.11	1,389	14.30	1,369	14.13	1,388	14.35	1,402	14.40	1,357	14.03	1,363	14.04	1,393	14.36	1,368	14.07	1,417	14.56	1,382	14.23	B	2.23%
Country Club Boulevard	Eastbound	Basic	663	677	2,855	2,897	30.65	2,902	30.97	2,937	31.24	2,907	30.91	2,878	30.61	2,893	30.85	2,903	31.00	2,918	30.97	2,895	30.94	2,847	30.25	2,898	30.84	D	1.50%
Country Club Boulevard	Westbound	Basic	878	864	1,932	1,964	20.44	1,955	20.28	1,975	20.65	1,934	20.14	1,966	20.55	1,933	20.18	1,967	20.53	1,957	20.42	1,910	19.97	1,919	20.03	1,948	20.32	C	0.83%
Santa Barbara Boulevard	Westbound	Basic	844	834	1,009	1,020	10.43	1,007	10.32	1,008	10.34	1,041	10.67	1,010	10.37	978	10.00	1,009	10.39	1,028	10.50	971	10.00	1,022	10.48	1,009	10.35	B	0.04%
Skyline Boulevard	Westbound	Basic	816	808	1,525	1,533	15.88	1,546	15.95	1,532	15.76	1,529	15.84	1,507	15.64	1,534	15.86	1,536	15.86	1,524	15.72	1,548	15.94	1,494	15.36	1,528	15.78	B	0.22%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	48.15	48.35	48.05	48.07	48.05	48.07	48.03	48.09	48.08	48.00	48.09
Santa Barbara Boulevard	Eastbound	Basic	633	643	48.93	48.76	48.58	48.57	48.66	48.56	48.61	48.50	48.56	48.57	48.63
Country Club Boulevard	Eastbound	Basic	663	677	47.16	46.88	47.02	46.85	47.08	46.78	46.87	47.09	46.78	46.96	46.95
Country Club Boulevard	Westbound	Basic	878	864	48.01	48.07	47.90	47.98	47.83	47.91	47.90	47.94	47.96	47.97	47.95
Santa Barbara Boulevard	Westbound	Basic	844	834	48.94	48.89	48.87	48.76	48.67	48.87	48.84	48.79	48.86	48.80	48.83
Skyline Boulevard	Westbound	Basic	816	808	48.35	48.36	48.39	48.25	48.20	48.27	48.40	48.33	48.51	48.42	48.35







**Veterans Memorial Parkway Toll Justification Report**  
**2015 CORSIM Freeway Outputs - Alternative 2 PM Peak Hour**

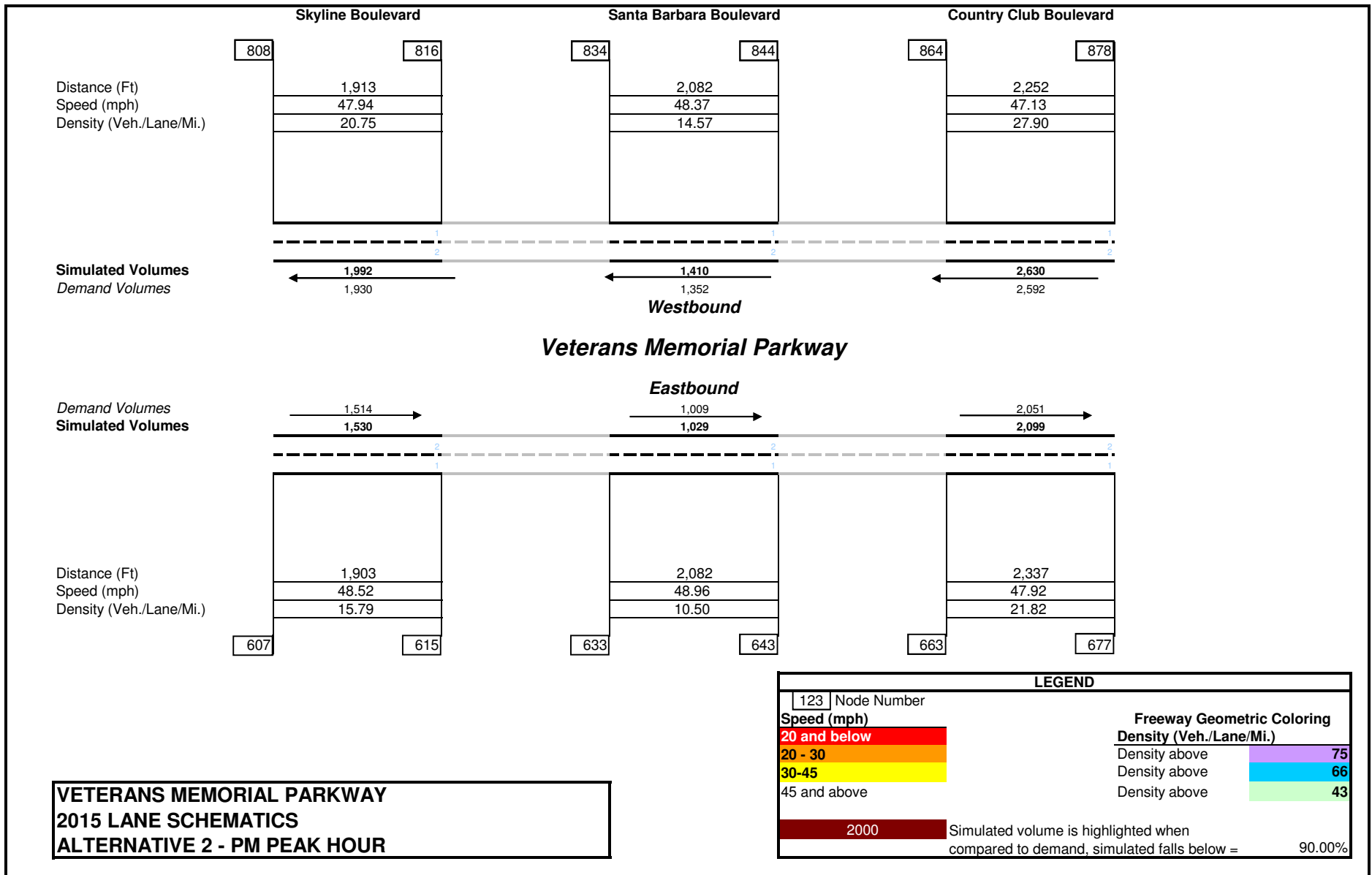
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,514	1,537	15.89	1,526	15.79	1,514	15.56	1,496	15.45	1,520	15.69	1,519	15.52	1,554	15.96	1,526	15.78	1,516	15.66		1,593
Santa Barbara Boulevard	Eastbound	Basic	633	643	1,009	1,054	10.73	1,005	10.21	1,003	10.19	1,055	10.75	1,029	10.49	1,002	10.22	1,034	10.60	1,031	10.56	1,012	10.32	1,067	10.95	1,029	10.50	B	2.00%
Country Club Boulevard	Eastbound	Basic	663	677	2,051	2,061	21.38	2,075	21.52	2,073	21.50	2,123	22.04	2,118	22.06	2,064	21.52	2,117	21.97	2,070	21.55	2,122	21.98	2,167	22.66	2,099	21.82	C	2.34%
Country Club Boulevard	Westbound	Basic	878	864	2,592	2,627	27.91	2,676	28.44	2,639	28.04	2,626	27.94	2,588	27.41	2,622	27.71	2,621	27.74	2,618	27.79	2,660	28.23	2,622	27.82	2,630	27.90	D	1.46%
Santa Barbara Boulevard	Westbound	Basic	844	834	1,352	1,408	14.58	1,426	14.69	1,400	14.37	1,440	14.84	1,403	14.59	1,362	14.12	1,416	14.65	1,389	14.31	1,432	14.75	1,427	14.81	1,410	14.57	B	4.31%
Skyline Boulevard	Westbound	Basic	816	808	1,930	1,950	20.34	1,966	20.58	2,002	20.69	2,035	21.10	2,016	21.15	1,940	20.27	1,960	20.45	1,996	20.76	2,021	20.95	2,029	21.23	1,992	20.75	C	3.19%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	48.29	48.51	48.59	48.54	48.42	48.86	48.70	48.53	48.53	48.20	48.52
Santa Barbara Boulevard	Eastbound	Basic	633	643	48.99	49.10	49.20	48.81	48.90	49.07	48.94	48.86	49.11	48.62	48.96
Country Club Boulevard	Eastbound	Basic	663	677	47.96	48.07	48.09	47.87	48.02	47.90	47.95	47.82	47.92	47.61	47.92
Country Club Boulevard	Westbound	Basic	878	864	47.01	47.02	47.08	47.03	47.29	47.29	47.22	47.09	47.14	47.10	47.13
Santa Barbara Boulevard	Westbound	Basic	844	834	48.22	48.41	48.56	48.43	48.34	48.29	48.29	48.46	48.54	48.16	48.37
Skyline Boulevard	Westbound	Basic	816	808	47.86	47.76	48.17	47.98	47.76	47.89	47.99	48.01	48.23	47.78	47.94





**Veterans Memorial Parkway Toll Justification Report  
2035 CORSIM Freeway Outputs - Alternative 2 AM Peak Hour**

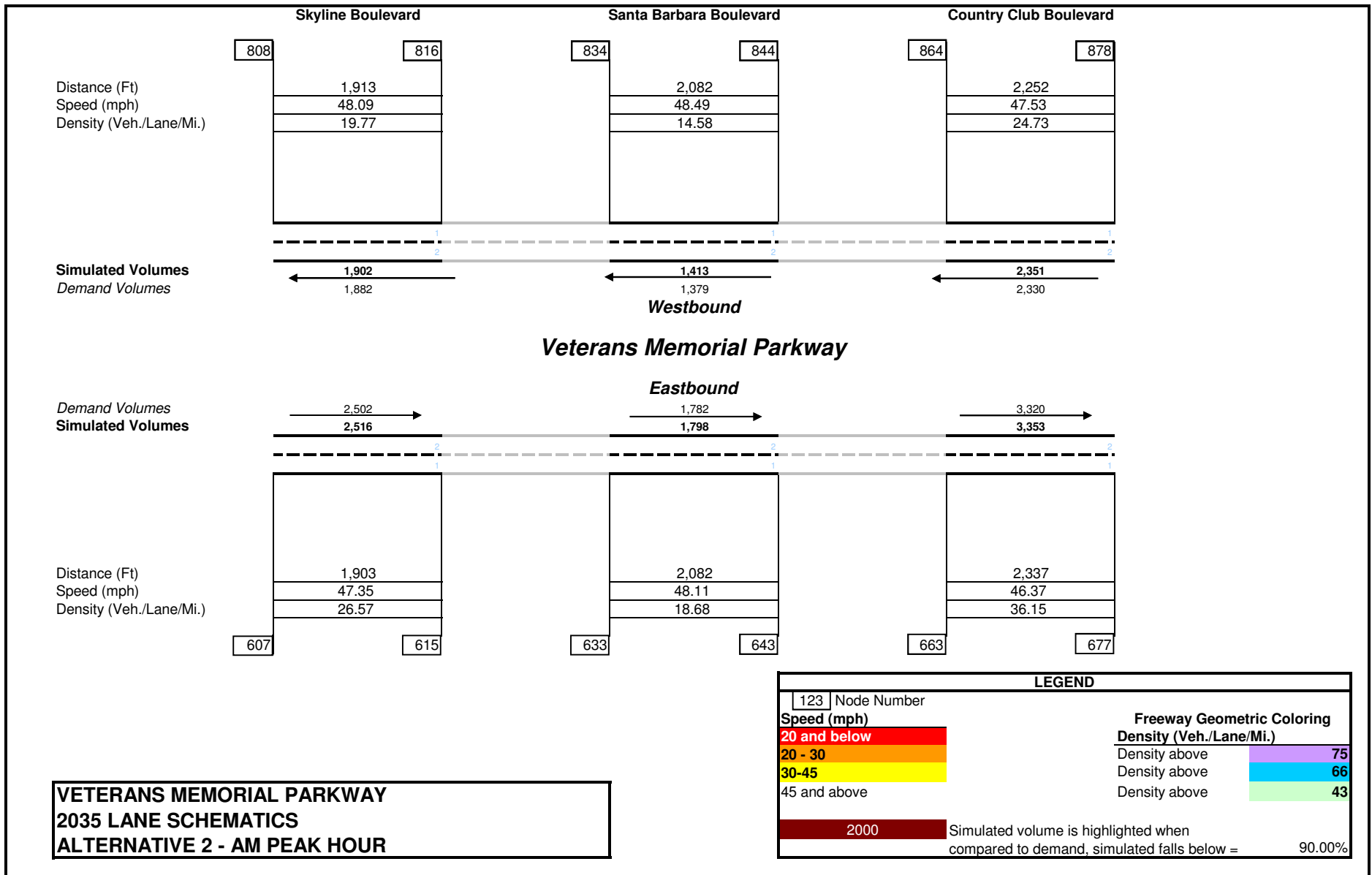
**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	2,502	2,535	26.84	2,522	26.55	2,506	26.38	2,514	26.65	2,520	26.75	2,501	26.30	2,527	26.74	2,528	26.78	2,515	26.49		2,489
Santa Barbara Boulevard	Eastbound	Basic	633	643	1,782	1,837	19.15	1,781	18.43	1,794	18.56	1,792	18.62	1,823	19.06	1,836	19.05	1,777	18.42	1,787	18.61	1,797	18.77	1,753	18.19	1,798	18.68	C	0.88%
Country Club Boulevard	Eastbound	Basic	663	677	3,320	3,435	37.14	3,273	35.15	3,359	36.13	3,318	35.75	3,357	36.35	3,399	36.73	3,379	36.43	3,351	36.15	3,357	36.28	3,297	35.41	3,353	36.15	E	0.98%
Country Club Boulevard	Westbound	Basic	878	864	2,330	2,360	24.88	2,341	24.57	2,377	24.91	2,335	24.53	2,409	25.38	2,354	24.88	2,319	24.40	2,341	24.65	2,349	24.74	2,322	24.35	2,351	24.73	D	0.89%
Santa Barbara Boulevard	Westbound	Basic	844	834	1,379	1,442	14.97	1,415	14.47	1,431	14.84	1,392	14.37	1,409	14.63	1,434	14.83	1,377	14.17	1,426	14.65	1,411	14.57	1,397	14.33	1,413	14.58	B	2.49%
Skyline Boulevard	Westbound	Basic	816	808	1,882	1,973	20.50	1,912	19.86	1,930	20.13	1,874	19.53	1,849	19.20	1,901	19.83	1,881	19.56	1,862	19.38	1,929	19.97	1,904	19.76	1,902	19.77	C	1.04%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	47.19	47.40	47.50	47.18	47.14	47.56	47.32	47.22	47.51	47.44	47.35
Santa Barbara Boulevard	Eastbound	Basic	633	643	48.02	48.24	48.23	48.10	47.84	48.19	48.19	48.14	48.02	48.16	48.11
Country Club Boulevard	Eastbound	Basic	663	677	46.35	46.55	46.43	46.53	46.14	46.29	46.29	46.27	46.30	46.37	
Country Club Boulevard	Westbound	Basic	878	864	47.42	47.61	47.61	47.54	47.43	47.38	47.60	47.54	47.51	47.67	47.53
Santa Barbara Boulevard	Westbound	Basic	844	834	48.30	48.82	48.49	48.47	48.27	48.39	48.59	48.52	48.45	48.65	48.49
Skyline Boulevard	Westbound	Basic	816	808	47.98	48.19	48.01	47.93	48.01	48.04	48.02	48.18	48.28	48.09	







**Veterans Memorial Parkway Toll Justification Report  
2035 CORSIM Freeway Outputs - Alternative 2 PM Peak Hour**

**Level of Service**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Demand Volume	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		Average		Volume Percent Difference	
			A	B		CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)	CORSIM Volume	Density (Veh./Lane/Mi.)		LOS
			Skyline Boulevard	Eastbound		Basic	607	615	1,869	1,872	19.42	1,854	19.18	1,878	19.51	1,900	19.81	1,842	19.24	1,884	19.57	1,900	19.79	1,907	19.80	1,900	19.72		1,875
Santa Barbara Boulevard	Eastbound	Basic	633	643	1,379	1,398	14.36	1,367	14.12	1,356	14.02	1,446	14.92	1,323	13.64	1,419	14.58	1,404	14.43	1,386	14.23	1,371	14.09	1,368	14.07	1,384	14.24	B	0.35%
Country Club Boulevard	Eastbound	Basic	663	677	2,480	2,549	26.68	2,484	26.10	2,449	25.83	2,526	26.59	2,432	25.75	2,538	26.61	2,534	26.72	2,479	25.99	2,505	26.29	2,510	26.31	2,501	26.29	D	0.83%
Country Club Boulevard	Westbound	Basic	878	864	3,134	3,133	33.61	3,142	33.68	3,161	34.09	3,123	33.47	3,092	33.22	3,151	33.74	3,146	33.79	3,207	34.51	3,146	33.76	3,170	34.15	3,147	33.80	D	0.42%
Santa Barbara Boulevard	Westbound	Basic	844	834	1,782	1,832	19.01	1,745	18.16	1,793	18.64	1,782	18.68	1,703	17.75	1,817	18.88	1,813	18.81	1,789	18.62	1,775	18.44	1,816	18.99	1,787	18.60	C	0.25%
Skyline Boulevard	Westbound	Basic	816	808	2,519	2,572	27.13	2,561	27.14	2,546	26.95	2,567	27.20	2,499	26.49	2,608	27.49	2,625	27.76	2,544	26.83	2,516	26.55	2,556	27.10	2,559	27.06	D	1.60%

Density (Veh./Lane/Mi.)  
 Density above 75  
 Density above 66  
 Density above 43

**Segment Speeds**

Veterans Memorial Parkway section above	Direction	Type Section	CORSIM Nodes		Run 1 Speed	Run 2 Speed	Run 3 Speed	Run 4 Speed	Run 5 Speed	Run 6 Speed	Run 7 Speed	Run 8 Speed	Run 9 Speed	Run 10 Speed	Average
			A	B											
Skyline Boulevard	Eastbound	Basic	607	615	48.28	48.32	48.21	47.94	47.92	48.16	47.91	48.14	48.12	48.21	48.12
Santa Barbara Boulevard	Eastbound	Basic	633	643	48.70	48.38	48.36	48.37	48.32	48.60	48.56	48.59	48.56	48.59	48.50
Country Club Boulevard	Eastbound	Basic	663	677	47.60	47.48	47.31	47.32	47.00	47.71	47.31	47.54	47.41	47.49	47.42
Country Club Boulevard	Westbound	Basic	878	864	46.61	46.71	46.37	46.66	46.62	46.66	46.58	46.43	46.60	46.42	46.57
Santa Barbara Boulevard	Westbound	Basic	844	834	48.05	48.12	47.96	47.92	47.96	48.18	48.08	47.94	48.07	47.92	48.02
Skyline Boulevard	Westbound	Basic	816	808	47.23	47.15	47.19	47.19	47.08	47.38	47.23	47.35	47.35	47.22	47.24

