

# Southeastern San Diego and Encanto Neighborhoods Community Plan Update Mobility Element Update - Traffic Impact Study

Prepared for

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FINAL REPORT

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# **Mobility Element Update**

# **Traffic Impact Study**

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### **Draft Final Report**

*Prepared for:*

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July 7, 2014

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# Table of Contents

<b>Executive Summary .....</b>	<b>ES-i</b>
Purpose of the Report .....	ES-i
<b>1.0 Introduction .....</b>	<b>1</b>
1.1 Purpose of the Report.....	1
1.2 Report Organization.....	3
<b>2.0 Analysis Methodology .....</b>	<b>4</b>
2.1 Selection of the Study Area .....	4
2.1.1 Roadway Segments.....	4
2.1.2 Intersections .....	4
2.2 Level of Service Definition .....	6
2.2.1 Roadway Segment Level of Service Standards and Thresholds .....	6
2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds .....	7
2.2.3 Freeway/State Highway Level of Service Standards and Thresholds.....	9
2.2.4 Ramp Metering Analysis .....	10
2.3 Determination of Significant Impacts.....	11
<b>3.0 Existing Conditions .....</b>	<b>12</b>
3.1 Trip Generation.....	12
3.1.1 Vehicle Miles Traveled.....	17
3.2 Roadway Segment Analysis .....	17
3.3 Intersection Analysis.....	45
3.4 Freeway/State Highway Segment Analysis.....	61
3.5 Freeway Ramp Metering Analysis .....	66
<b>4.0 Preferred Plan .....</b>	<b>67</b>
4.1 Trip Generation.....	67
4.2 Vehicle Miles Traveled.....	74
4.3 Roadway Segment Analysis .....	76
4.4 Intersection Analysis.....	99
4.5 Freeway/State Highway Segment Analysis.....	117
4.6 Ramp Metering Analysis .....	124
4.7 Significant Impacts and Mitigation Measures .....	126
<b>5.0 Plan Alternatives .....</b>	<b>136</b>
5.1 Adopted Community Plan (No Project) .....	136
5.1.1 Trip Generation.....	136
5.2 High Density Alternative .....	143
5.2.1 Trip Generation.....	143
5.2.2 Vehicle Miles Traveled.....	150
5.2.3 Roadway Segment Analysis .....	152
5.2.4 Freeway/State Highway Segment Analysis.....	164
5.2.5 Significant Impacts and Mitigation Measures .....	172

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5.3 Lower-Density Alternative .....	181
5.3.1 Trip Generation .....	181
<b>6.0 Summary .....</b>	<b>188</b>
6.1 Summary of Trip Generation Analysis .....	188
6.2 Summary of VMT Analysis .....	189
6.3 Summary of Roadway Segment Analysis .....	191
6.4 Summary of Intersection Analysis .....	197
6.5 Summary of Freeway/State Highway Segment Analysis .....	200
6.6 Significant Impacts and Mitigation Measures .....	203

**Appendices**

Appendix A	Model Trip Generation
Appendix B	VMT Calculation – Existing Conditions
Appendix C	Roadway Average Daily Traffic Counts
Appendix D	Peak Hour Arterial Analysis Worksheets – Existing Conditions
Appendix E	Peak Period Intersection Turning Movement Counts
Appendix F	Peak Hour Intersection LOS Analysis Worksheets – Existing Conditions
Appendix G	Caltrans Freeway Traffic Volumes (2011)
Appendix H	Caltrans Ramp Meter Rates
Appendix I	SANDAG Series 12 Model Outputs and Documentation
Appendix J	VMT Calculation – Future Conditions
Appendix K	Peak Hour Arterial Analysis Worksheets - Preferred Plan
Appendix L	Peak Hour Intersection LOS Analysis Worksheets – Preferred Plan
Appendix M	SANDAG Series 12 Model Outputs, Documentation and VMT Analysis High Density Alternative



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## List of Figures

Figure 1-1	Project Study Area.....	2
Figure 2-1	Project study roadway segments and intersection.....	5
Figure 3-1	Trip Generation by TAZ – Existing Condition .....	16
Figure 3-2	Existing Conditions Roadway Network .....	18
Figure 3-3	Existing Conditions Roadway Traffic Volumes and Level of Service .....	27
Figure 3-4	Existing Intersection Geometrics .....	46
Figure 3-5	Existing AM/PM Peak Hour Intersection Turning Movements .....	51
Figure 4-1	Trip Generation Growth by TAZ – Preferred Plan vs. Existing Condition.....	73
Figure 4-2	Preferred Plan Roadway Network.....	93
Figure 4-3	Preferred Plan Roadway Traffic Volumes and Level of Service .....	94
Figure 4-4	Preferred Plan Intersection Geometrics .....	101
Figure 4-5	Preferred Plan AM/PM Peak Hour Intersection Turning Movements .....	106
Figure 5-1	Trip Generation Growth by TAZ – Adopted Community Plan (No Project) vs. Existing Condition .....	142
Figure 5-2	Trip Generation Growth by TAZ – High Density Alternative vs. Existing Condition .....	149
Figure 5-3	High Density Alternative Roadway Traffic Volumes and Level of Service.....	162
Figure 5-4	Trip Generation Growth by TAZ – Lower-Density Alternative vs. Existing Condition .....	187

## List of Tables

Table 2-1	Vehicular Level of Service Definitions .....	6
Table 2-2	City of San Diego Roadway Segment Daily Capacity and Level of Service Standards.....	7
Table 2-3	Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method.....	8
Table 2-4	Level of Service Criteria for Stop Controlled Unsignalized Intersections.....	9
Table 2-5	Caltrans District 11 Freeway Segment Level of Service Definitions .....	10
Table 2-6	City of San Diego Measures of Significant Project Traffic Impacts.....	11
Table 3-1	Southeastern San Diego Existing Land Uses.....	12
Table 3-2	Encanto Existing Land Uses .....	14
Table 3-3	Vehicle Miles Traveled (VMT) Comparison Existing Conditions.....	17
Table 3-4	Existing Roadway Segment Level of Service Results .....	29
Table 3-5	Existing Arterial Analysis Along Urban Streets .....	43
Table 3-6	Existing Peak Hour Intersection Level of Service Results .....	56
Table 3-7	Existing Freeway Segment Level of Service Results .....	63
Table 3-8	Existing Ramp Metering Analysis .....	66
Table 4-1	Land Use Comparison - Southeastern Preferred Plan vs. Existing Conditions .....	67
Table 4-2	Land Use Comparison - Encanto Preferred Plan vs. Existing Conditions.....	70
Table 4-3	Vehicle Miles Traveled (VMT) Comparison Preferred Plan vs. Existing Conditions .....	75
Table 4-4	Roadway Segment Level of Service Results Preferred Plan vs. Existing Conditions .....	77
Table 4-5	Preferred Plan Arterial Analysis Along Urban Streets .....	97
Table 4-6	Peak Hour Intersection Level of Service Results Preferred Plan vs. Existing Conditions.....	111
Table 4-7	Freeway Segment Level of Service Results Preferred Plan vs. Existing Conditions .....	118
Table 4-8	Ramp Metering Analysis Preferred Plan vs. Existing Conditions.....	125

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Table 5-1	Land Use Comparison – Southeastern San Diego Adopted Community Plan vs. Existing Conditions .....	136
Table 5-2	Land Use Comparison - Encanto Adopted Community Plan vs. Existing Conditions .....	139
Table 5-3	Land Use Comparison - Southeastern High Density vs. Existing Conditions.....	143
Table 5-4	Land Use Comparison - Encanto High Density vs. Existing Conditions.....	146
Table 5-5	Vehicle Miles Traveled (VMT) Comparison High Density Alternative vs. Existing Conditions.....	151
Table 5-6	Roadway Segment Level of Service Results High Density Alternative vs. Existing Conditions.....	153
Table 5-7	Freeway Segment Level of Service Results High Density Alternative vs. Existing Conditions.....	166
Table 5-8	Land Use Comparison – Southeastern San Diego Lower-Density Alternative vs. Existing Conditions.....	181
Table 5-9	Land Use Comparison - Encanto Lower-Density Alternative vs. Existing Conditions.....	184
Table 6-1	Trip Generation Comparison Summary.....	188
Table 6-2	Summary of Vehicle Miles Traveled (VMT) Existing Condition vs. Preferred Plan vs. High Density Alternative.....	190
Table 6-3	Summary of Roadway Segments Level of Service Results .....	191
Table 6-4	Summary of Intersection Peak Hour Level of Service Results.....	197
Table 6-5	Summary of Freeway Segment Level of Service Results.....	201

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# Executive Summary

## Purpose of the Report

The purpose of this Traffic Impact Study (TIS) is to identify and document potential traffic impacts related to the buildout of the preferred land use plan associated with the Southeastern San Diego and Encanto Neighborhoods Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing Conditions and buildout of the Community Plan Updates and compares these to the projected 2050 VMT per person and average trip length for the entire Region.

In addition, in order to assess potential impacts for EIR alternatives, this report provides comparisons of vehicle trip generation associated with land uses for the Existing Conditions and buildout land uses for the Preferred Plan, the Adopted Community Plan (No Project), the High Density Alternative, and the Lower-Density Alternative; and provides VMT as well as impact assessment of roadway and freeway operating conditions for the High Density Alternative.

### Preferred Plan

#### Intersection Impacts

##### Southeastern San Diego

23. 28th Street / National Avenue;
38. I-15 NB Ramps / Ocean View Boulevard;
49. 40th Street / Imperial Avenue; and
63. 47th Street / I-805 SB Ramps.

##### Encanto Neighborhoods

68. Euclid Avenue / Imperial Avenue;
69. Euclid Avenue / Olvera Avenue; and
79. Woodman Street / Skyline Drive.

##### Sphere of Influence

7. I-5 SB Off-Ramp / Beardsley Street / Logan Avenue;
40. I-15 Ramps / Main Street; and
43. I-5 SB Off-Ramp/Yama Street/Main Street.

#### Roadway Impacts

##### Southeastern San Diego

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street;
10. Market Street, between Boundary Street and I-805 SB Ramps;
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street;
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;

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18. Imperial Avenue, between 28th Street and 30th Street;
  20. Imperial Avenue, between 32nd Street & 36th Street;
  21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
  37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
  39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps;
  41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street;
  42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
  48. National Avenue, between 27th Street and 28th Street;
  49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps;
  50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street;
  51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street;
  57. Division Street, between Main Street and Osborn Street;
  56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street;
  66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps;
  68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp;
  69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
  70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue;
  72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps;
  73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street;
  74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue;
  76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard;
  77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue;
  79. 30<sup>th</sup> Street, between E Street and Imperial Avenue;
  83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street;
  84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue;
  87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue;
  88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue;
  89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street;
  99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue;
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street;
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street;
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street; and
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street.

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street;
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway;
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway;
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street;
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street;
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street;
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive;
123. Plaza Boulevard, between Division Street and Woodman Street;

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124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
  125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue;
  126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue;
  127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps;
  137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps;
  138. Kelton Road, between SR-94 EB Ramps and Alvin Street;
  139. Alvin Street, between Kelton Road and Pitta Street;
  140. Pitta Street, between Alvin Street and Market Street;
  146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue;
  147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street; and
  152. Woodman Street, between Imperial Avenue and Skyline Drive.

### *Southeastern San Diego & Encanto Neighborhoods*

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps;
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street; and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street.

### *Sphere of Influence*

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp;
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street; and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue.

### **Freeway Impacts**

- I-5, between 17th Street and SR-94;
- I-5, between SR-94 and Imperial Avenue;
- I-5, between Imperial Avenue and SR-75;
- I-5, between SR-75 and 28th Street;
- I-5, between 28th Street and I-15;
- I-5, between I-15 and Main Street;
- I-15, between I-805 and SR-94;
- I-15, between Market Street and Ocean View Boulevard;
- I-805, between Market Street and Imperial Avenue;
- I-805, between Imperial Avenue and 43rd Street;
- SR-94, between 17th Street and 25th Street;
- SR-94, between 25th Street and 28th Street;
- SR-94, between 28th Street and 30th Street;
- SR-94, between 30th Street and I-15;
- SR-94, between I-15 and Home Avenue;
- SR-94, between Home Avenue and I-805;
- SR-94, between I-805 and 47th Street;
- SR-94, between 47th Street and Euclid Avenue;
- SR-94, between Euclid Avenue and Kelton Road;

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- SR-94, between Kelton Road and Federal Boulevard;
  - SR-94, between Federal Boulevard and College Grove Way; and
  - SR-94, between College Grove Way and College Avenue.

### **High Density Alternative**

#### **Intersection Impacts**

Not Analyzed

#### **Roadway Impacts**

##### **Southeastern San Diego**

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street;
10. Market Street, between Boundary Street and I-805 SB Ramps;
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street;
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street;
21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps;
41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street;
42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street;
49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps;
50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street;
51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street;
57. Division Street, between Main Street and Osborn Street;
56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street;
66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps;
68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp;
69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue;
72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps;
73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street;
74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue;
76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard;
77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue;
79. 30<sup>th</sup> Street, between E Street and Imperial Avenue;
83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street;
84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue;
86. 32<sup>nd</sup> Street, between Commercial Street and Ocean View Boulevard;

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87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue;
  88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue;
  89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street;
  99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue;
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street;
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street;
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street; and
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street.

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street;
24. Imperial Avenue, between I-805 NB Ramps and 47<sup>th</sup> Street;
25. Imperial Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway;
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway;
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street;
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street;
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street;
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive;
123. Plaza Boulevard, between Division Street and Woodman Street;
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue;
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue;
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps;
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps;
138. Kelton Road, between SR-94 EB Ramps and Alvin Street;
139. Alvin Street, between Kelton Road and Pitta Street;
140. Pitta Street, between Alvin Street and Market Street;
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue;
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street; and
152. Woodman Street, between Imperial Avenue and Skyline Drive.

#### Southeastern San Diego & Encanto Neighborhoods

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps;
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street; and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street.

#### Sphere of Influence

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp;
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street; and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue.



### **Freeway Impact**

- I-5, between 17th Street and SR-94;
- I-5, between SR-94 and Imperial Avenue;
- I-5, between Imperial Avenue and SR-75;
- I-5, between SR-75 and 28th Street;
- I-5, between 28th Street and I-15;
- I-5, between I-15 and Main Street;
- I-15, between I-805 and SR-94;
- I-15, between Market Street and Ocean View Boulevard;
- I-805, between Market Street and Imperial Avenue;
- I-805, between Imperial Avenue and 43rd Street;
- SR-94, between 17th Street and 25th Street;
- SR-94, between 25th Street and 28th Street;
- SR-94, between 28th Street and 30th Street;
- SR-94, between 30th Street and I-15;
- SR-94, between I-15 and Home Avenue;
- SR-94, between Home Avenue and I-805;
- SR-94, between I-805 and 47th Street;
- SR-94, between 47th Street and Euclid Avenue;
- SR-94, between Euclid Avenue and Kelton Road;
- SR-94, between Kelton Road and Federal Boulevard;
- SR-94, between Federal Boulevard and College Grove Way; and
- SR-94, between College Grove Way and College Avenue.

### **Trip Generation**

The following table displays the estimated vehicle trip generation by community under Existing Conditions, as well as the various plan alternatives.

	Preferred Plan	Adopted Community Plan (No Project)	High Density Alternative	Lower-Density Alternative	Existing Conditions
<b>Southeastern San Diego</b>					
Trip Generation	375,546	368,143	378,463	371,564	316,877
Change in Trip Generation vs. Existing Conditions	58,669	51,266	61,586	54,687	-
Growth Rate	18.51%	16.18%	19.44%	17.26%	-
<b>Encanto Neighborhoods</b>					
Trip Generation	267,505	247,657	299,386	265,624	191,218
Change in Trip Generation vs. Existing Conditions	76,287	56,439	105,468	74,406	-
Growth Rate	39.90%	29.52%	55.15%	38.91%	-

Source: Chen Ryan Associates; June 2015



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As shown, the High Density Alternative would have the highest rate of growth for both the Southeastern San Diego and Encanto Neighborhoods communities, followed by the Preferred Plan and the Lower-Density Alternative for both the Southeastern San Diego and Encanto Neighborhoods community.

### **Vehicle Miles Traveled (VMT)**

The table below provides a comparison of VMT by community under the Existing Conditions, the Preferred Plan, and the High Density Alternative. As shown in the table, under the Preferred Plan, both Southeastern San Diego and Encanto Neighborhoods communities would have significantly shorter average vehicle trip length and daily VMT per person when compared to the San Diego region.

Measure	Southeastern San Diego				Encanto				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
<b>Preferred Plan</b>												
Total VMT (miles)	291,677	356,250	64,573	22.10%	206,790	293,099	86,309	41.70%	85,331,631	108,419,301	23,087,670	27.10%
Average Trip Length* (miles)	1.39	1.44	0.05	3.40%	2.01	1.96	-0.05	-2.30%	5.18	5.37	0.19	3.60%
Daily VMT by Population (miles)	5.1	5.1	0	0.00%	4.3	3.8	-0.5	-11.60%	27.3	26.9	-0.4	-1.50%
<b>High Density Alternative</b>												
Total VMT (miles)	291,677	362,950	71,273	24.40%	206,790	313,294	106,504	51.50%	85,331,631	108,496,206	23,164,575	27.10%
Average Trip Length* (miles)	1.39	1.43	0.04	3.10%	2.01	1.89	-0.12	-5.90%	5.18	5.37	0.18	3.60%
Daily VMT by Population (miles)	5.1	5.0	-0.1	-2.00%	4.3	3.6	-0.70	-16.30%	27.3	26.8	-0.5	-1.80%
Change in Average Trip Length (High Density – Preferred)	-	-0.01	-0.01	-0.30%	-	-0.07	-0.07	-3.60%	-	0.00	-0.01	0.00%
Change in VMT (High Density – Preferred)	-	-0.1	-0.1	-2.00%	-	-0.2	-0.2	-4.70%	-	-0.1	-0.1	-0.30%

Source: Chen Ryan Associates; June 2015

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# 1.0 Introduction

## 1.1 Purpose of the Report

The purpose of this Traffic Impact Study (TIS) is to identify and document potential traffic impacts related to the buildout of the preferred land use plan associated with the Southeastern San Diego and Encanto Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway deficiencies. This technical report also provides vehicle miles traveled (VMT) for the Existing Conditions and buildout of the Community Plan Updates and compares these to the projected 2050 VMT per person and average trip length for the entire Region.

In addition, in order to assess potential impacts for EIR alternatives, this report provides comparisons of vehicle trip generation associated with land uses for the Existing Conditions and buildout land uses for the Preferred Plan, the Adopted Community Plan (No Project), the High Density Alternative, and the Lower-Density Alternative; and provides VMT as well as impact assessment of roadway and freeway operating conditions for the High Density Alternative.

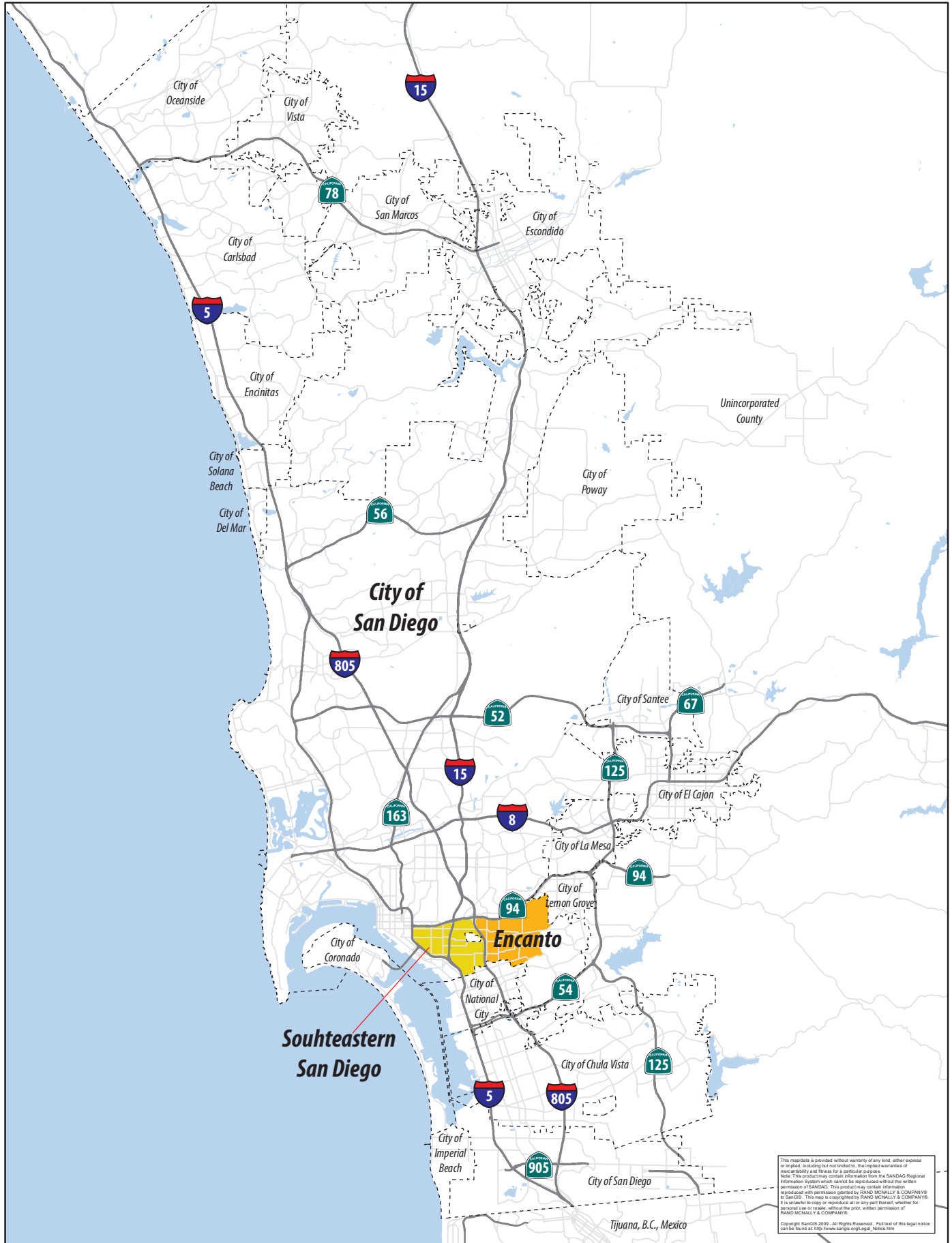
**Figure 1-1** displays the project study area for both the Southeastern San Diego and Encanto communities. This report identifies significant traffic impacts and potential mitigation measures associated with the Southeastern San Diego and Encanto Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

### Study Scenarios

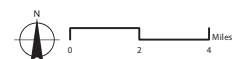
A total of four (4) scenarios were evaluated at varying levels for this Community Plan Update traffic impact study, including:

- Existing Conditions - utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan - represents the preferred land use plan and the proposed roadway network. The Preferred Plan was developed by the project consultant team led by Dyett & Bhatia with collaboration from City staff and community members, and modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the proposed Community Plan land uses and Year 2035 land uses outside of the two subject communities for regional growth.
- Adopted Community Plan (No Project) - represents the currently adopted Community Plan (adopted by City Council on July 13, 1987). The adopted Community Plan land uses were provided by the City of San Diego Planning Department. A vehicle trip generation by traffic analysis zone analysis was conducted for this scenario in order to provide a general comparison to the other scenarios.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATE



**Figure 1-1: Project Study Area**



Data Source:  
 City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012; Dyett & Bhatia, 2012



- 
- High Density Alternative - represents a more intense land use scenario than the Preferred Plan and the proposed roadway network. The High Density Alternative land uses were developed by the project consultant team led by Dyett & Bhatia with collaboration from City staff and community members, and modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the proposed Community Plan land uses and Year 2035 land uses outside of the two subject communities for regional growth.
  - Lower-Density Alternative – represents a less intense land use scenario than the Preferred Plan. The Lower-Density Alternative land uses were developed by the project consultant team led by Dyett & Bhatia with collaboration from City staff. A vehicle trip generation by traffic analysis zone analysis was conducted for this scenario in order to provide a general comparison to the other scenarios.

## **1.2 Report Organization**

Following this introductory chapter, the report is organized into the following chapters:

- 1.0 Introduction – This chapter provide an introduction to the report.
- 2.0 Analysis Methodology – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway traffic conditions.
- 3.0 Existing Conditions - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.
- 4.0 Preferred Plan – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.
- 5.0 Alternatives - This chapter assesses the potential traffic impacts of the Adopted Community Plan (No Project), High Density Alternative, and Lower-Density Alternative by comparing their trip generation to the Existing Conditions and the Preferred Plan. In addition, for the High Density Alternative, roadway segments and well as freeway segments were evaluated. Mitigation measures for significant impacts are identified, if feasible.
- 6.0 Summary – This chapter summaries overall study findings and provide a comparison between the Preferred Plan and the various alternatives.

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## 2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network in Southeastern San Diego. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines*, SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

### 2.1 Selection of the Study Area

This section summarizes the approach to defining study area roadways and intersections.

Freeways and natural barriers are considered as general study area boundaries. The primary study area encompasses the community planning area and up to one segment and key intersection beyond in order to be consistent with the impact study area desired for California Environmental Quality Act (CEQA) analysis.

**Figure 2-1** displays roadway, intersection and Urban Street facilities that comprise the combined study areas for both the Southeastern San Diego and Encanto community plan updates.

#### 2.1.1 Roadway Segments

Study area roadway segments were defined as all currently adopted mobility element roads and one segment beyond community planning area boundaries, where not separated by freeways and natural barriers.

#### 2.1.2 Intersections

Study intersections within Southeastern San Diego include those where both intersecting streets meet one of the following criteria:

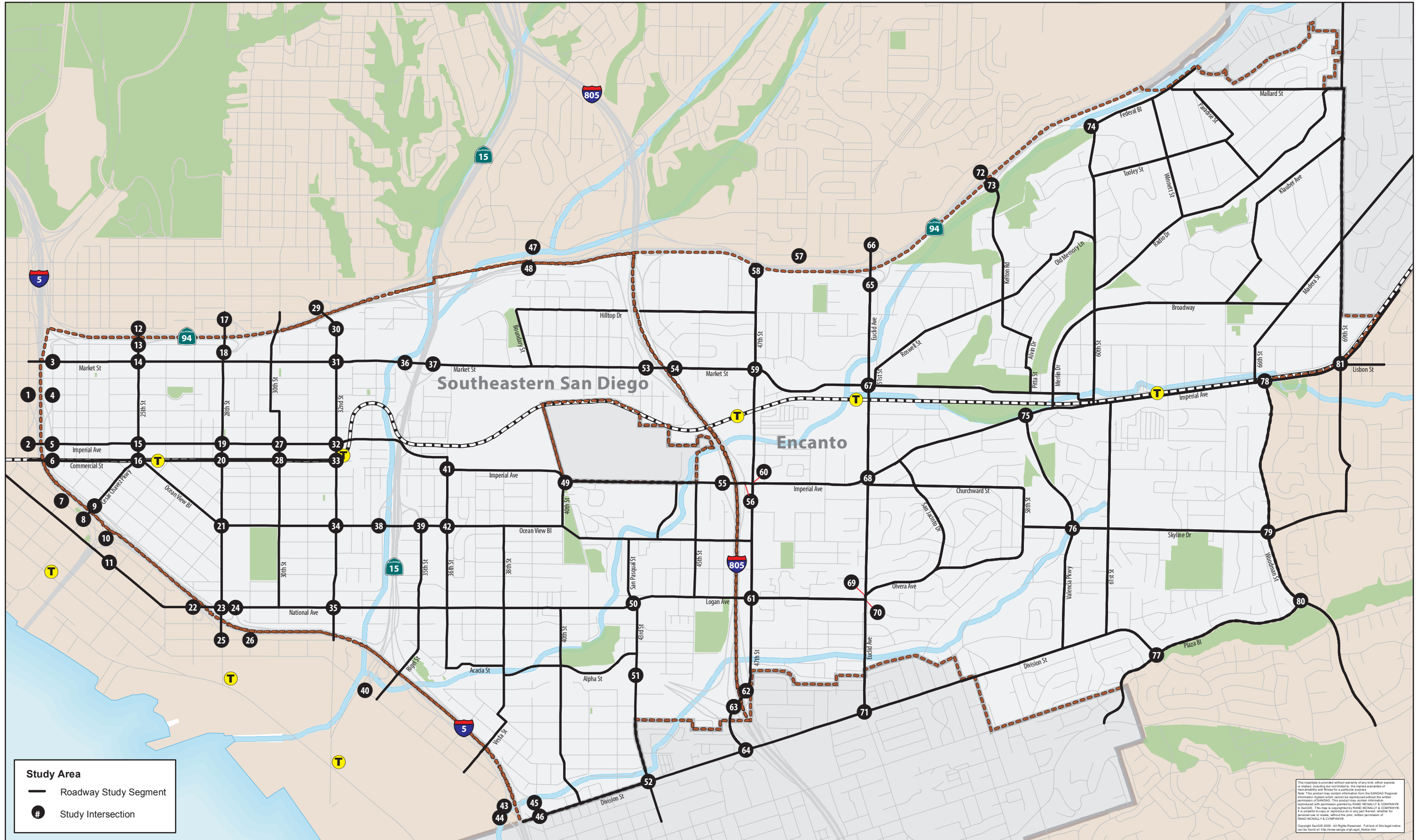
- 4-lanes or wider
- 3-lanes and carries over 15,000 average daily traffic
- 2-lanes and carries over 10,000 average daily traffic

Intersections providing freeway access, as well as a number of critical study intersections from other on-going City studies in the community were also included in the study area. These studies include: *Commercial/Imperial Corridor Master Plan*, *Mobility and Land Use Master Plan for National Avenue*, *Euclid+Market Land Use and Mobility Plan*, and *Mobility and Land Use Master Plan for Euclid Avenue*.

Based on these criteria, 81 study intersections were selected, as displayed in Figure 2-1. This includes 38 intersections locating within Southeastern San Diego, 22 intersections locating within Encanto Neighborhoods, and 21 intersections locating inside the Southeastern San Diego / Encanto Neighborhoods sphere of influence (outside of the communities).



# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



**Figure 2-1: Project Study Roadway Segments and Intersections**

## 2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver’s perspective, while LOS F represents the worst. **Table 2-1** describes generalized definitions of auto LOS A through F.

Table 2-1  
Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: 2000 Highway Capacity Manual.

### 2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. **Table 2-2** presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



Table 2-2  
City of San Diego  
Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Level of Service				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	< 70,000	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	< 55,000	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	< 45,000	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Secondary Arterial* / Collector (4-lane w/ center left-turn lane)	< 10,000	< 14,000	< 20,000	< 25,000	< 30,000
Collector (3-lane w/ center left-turn lane)	< 7,500	< 10,500	< 15,000	< 19,000	< 22,500
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	< 13,000	< 15,000
Collector (2-lane w/ center left-turn lane)					
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	< 9,000	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (2-lane multi-family)					
Sub-Collector (2-lane single-family)	-	-	< 2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998).

**Notes:**

Bold numbers indicate the ADT thresholds for acceptable LOS.

\*Secondary Arterial is a classification only applies to roadways in the City of National City. It utilizes identical LOS thresholds as a 4-Ln Collector w/center left-turn lane in the City of San Diego.

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

**2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds**

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in **Table 2-3**. The computerized analysis of intersection operations was performed utilizing the *Synchro 8.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3  
Signalized Intersection Level of Service  
Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	<i>LOS A</i> occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	<i>LOS B</i> occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with <i>LOS A</i> .
20.1 – 35.0	<i>LOS C</i> occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	<i>LOS D</i> occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	<i>LOS E</i> occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	<i>LOS F</i> occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: 2000 Highway Capacity Manual, Transportation Research Board Special Report 209.

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The *Synchro 8.0* software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control

delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or measured average control delay of all movements. **Table 2-4** summarizes the level of service criteria for unsignalized intersections.

Table 2-4  
Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: 2000 Highway Capacity Manual.

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

**2.2.3 Freeway/State Highway Level of Service Standards and Thresholds**

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour (“K”), directional (“D”) and truck (“T”) factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in **Table 2-5**. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour.

LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

Table 2-5  
Caltrans District 11  
Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
<i>Used for freeways, expressways and conventional highways</i>			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
<i>Used for conventional highways</i>			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
<i>Used for freeways and expressways</i>			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

### 2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway, with the goal of improving the traffic operations and flow on the freeway main lanes. Freeway ramp meter analysis estimates the peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates used in the analysis were obtained from Caltrans in November 2012. Ramp metering analyses to calculate delays at the study area freeway on-ramps were conducted based upon procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

## 2.3 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego.

Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. **Table 2-6** summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6  
City of San Diego  
Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department; January 2007

Note: \* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

## 3.0 Existing Conditions

This section describes key intersections, roadway and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. Level of service analysis results for all study area facilities under Existing Conditions are presented.

### 3.1 Trip Generation

Trip generation analysis was performed to provide an understanding of the vehicle trips generated by land uses under Existing Conditions. Trip generation rates for various land use categories were obtained from the *City of San Diego Trip Generation Manual* (May 2003). Existing Conditions land uses were provided by City's staff. **Table 3-1** and **Table 3-2** display the land use quantity and ADT by land use categories under Existing Conditions for the Southeastern San Diego and Encanto Neighborhoods communities, respectively.

Table 3-1  
Southeastern San Diego Existing Land Uses

Land Use	Amount	ADT
Arterial Commercial	849.0 ksf	33,952
Automobile Dealership	0.1 Acres	36
Automobile Parts Sale	5.7 ksf	356
Automobile Repair Shop	42.7 ksf	855
Automobile Tire Store	9.2 ksf	231
Cemetery	123.4 Acres	617
Clinic (Medical Office)	188.5 ksf	9,424
Communications and Utilities	21.9 Acres	-
Community Shopping Center (100,000 SF or more)	698.2 ksf	48,871
Convenience Market Chain (Open Up to 16 Hours Per Day)	40.3 ksf	20,150
Day Care Center	0 child	-
Elementary School	6,454 Students	12,264
Fire/Police Station	27.7 ksf	830
Government Office/Civic Center	52.4 ksf	1,573
Hotel (Low-Rise) (Motel)	91 Rooms	819
Junior High School or Middle School	1,454 Students	2,036
Landscape Open Space (Undeveloped Park)	3.0 Acres	-
Library	23.3 ksf	1,166
Light Industry - General	1,808.2 ksf	27,125
MF Residential less or equal 20 DU/acre	3,963 DU	31,704
MF Residential over 20 DU/acre	5,434 DU	32,604

**Table 3-1  
Southeastern San Diego Existing Land Uses**

<b>Land Use</b>	<b>Amount</b>	<b>ADT</b>
Neighborhood Shopping Center (30,000 SF or more)	48.1 ksf	5,772
Office (Low-Rise - 1 ksf to 5 ksf)	18.7 ksf	767
Office (Low-Rise - 5 ksf to 10 ksf)	20.9 ksf	710
Office (Low-Rise - 10 ksf to 15 ksf)	26.2 ksf	733
Office (Low-Rise - 50 ksf to 55 ksf)	97.8 ksf	1,957
Open Space Park or Preserve	36.2 Acres	182
Other Health Care	29.8 ksf	1,488
Other Public Services	28.5 ksf	285
Other Recreation - High (Developed Park)	6.0 Acres	299
Other Retail Trade and Strip Commercial	13.8 ksf	553
Other School	36.1 ksf	650
Other Transportation	1.3 Acres	8
Other University or College (Community College)	7,667 Students	12,267
Park - Active	72.2 Acres	3,609
Parking Lot - Structure	0.8 Acres	-
Parking Lot - Surface	3.6 Acres	-
Post Office	5.8 ksf	1,170
Public/Community Meeting Room Facility (Other Public Services)	9.9 ksf	297
Religious Facility (without day care)	628.0 ksf	3,137
Restaurant (High Turnover sit-down)	12.5 ksf	1,620
Scrap Yards/Auto Dismantling/Landfill	6.5 Acres	39
Senior High School	0 Students	-
Service Station	8 Station	1,080
Service Station (with food mart and automated carwash)	8 station	1,240
Service Station (with food mart)	12 station	1,800
Single Family Detached	4,360 DU	39,240
Single Family Multiple-Units	1,271 DU	11,439
Vacant and Undeveloped Land	64.7 Acres	-
Warehousing	103.2 ksf	517
Wholesale Trade	20.1 ksf	1,405
<b>TOTAL</b>	-	<b>316,877</b>

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 3-1, under Existing Conditions the Southeastern San Diego community would generate 316,877 daily trips.

Table 3-2  
Encanto Neighborhoods Existing Land Uses

Land Use	Amount	ADT
Alternative Correctional Facility	300 Cells	600
Arterial Commercial	236.5 ksf	9,459
Automobile Dealership	0.1 Acres	28
Automobile Repair Shop	8.8 ksf	177
Carwash (Self service)	4 stall	400
Cemetery	44.7 Acres	224
Commercial Recreation	9.0 ksf	269
Communications and Utilities	40.4 Acres	-
Community Shopping Center (100,000 SF or more)	81.0 ksf	5,673
Congregate Care Facility	18 Beds	54
Convenience Market Chain (Open Up to 16 Hours Per Day)	3.2 ksf	1,589
Day Care Center	145 child	725
Elementary School	5,114 Students	9,716
Fast Food (with or without Drive-through)	8.7 ksf	6,116
Fire/Police Station	14.5 ksf	435
Government Office (less or equal to 100,000 SF)	22.1 ksf	662
Government Office/Civic Center	18.5 ksf	556
Industrial Park	26.0 ksf	390
Junior High School or Middle School	1,547 Students	2,166
Landscape Open Space (Undeveloped Park)	0.1 Acres	-
Library	27.6 ksf	1,378
Light Industry - General	418.8 ksf	6,282
MF Residential less or equal 20 DU/acre	1,466 DU	11,728
MF Residential over 20 DU/acre	1,916 DU	11,496
Mobile Home Park	610 DU	3,050
Neighborhood Shopping Center (30,000 SF or more)	62.0 ksf	7,436
Office (Low-Rise - 1 ksf to 5 ksf)	3.3 ksf	134
Office (Low-Rise - 10 ksf to 15 ksf)	11.1 ksf	312
Office (Low-Rise - 60 ksf to 65 ksf)	64.0 ksf	1,216
Office (Low-Rise - 65 ksf to 70 ksf)	71.8 ksf	1,364
Open Space Park or Preserve	201.3 Acres	1,006



Table 3-2  
Encanto Neighborhoods Existing Land Uses

Land Use	Amount	ADT
Other Health Care	22.6 ksf	1,132
Other Recreation - High (Developed Park)	2.8 Acres	140
Other Retail Trade and Strip Commercial	12.6 ksf	502
Other School	24.3 ksf	437
Other Transportation	0.9 Acres	6
Park - Active	60.9 Acres	3,047
Parking Lot - Surface	6.6 Acres	-
Public/Community Meeting Room Facility (Other Public Services)	37.8 ksf	1,135
Rail Station/Transit Center	5.3 Acres	1,596
Religious Facility (without day care)	307.6 ksf	1,537
Restaurant (High Turnover sit-down)	4.2 ksf	552
Senior High School	3,283 Students	5,909
Service Station	8 Station	1,080
Service Station (with food mart and automated carwash)	12 station	1,860
Service Station (with food mart)	26 station	3,900
Single Family Detached	8,054 DU	72,486
Single Family Multiple-Units	1,174 DU	10,566
Spaced Rural Residential	2 DU	24
Supermarket (Standalone)	4.4 ksf	660
Vacant and Undeveloped Land	190.3 Acres	-
Warehousing	1.7 ksf	8
<b>TOTAL</b>	-	<b>191,218</b>

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 3-2, under Existing Conditions the Encanto Neighborhoods community generates 191,218 daily trips.

For verification purpose, trip generation by traffic analysis zone (TAZ) were conducted for the Southeastern and Encanto Neighborhoods communities. The vehicular trip generation by TAZ within the Southeastern San Diego and Encanto Neighborhoods communities are displayed in **Figure 3-1**. Trip generation by TAZ for each communities are provided in **Appendix A**.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

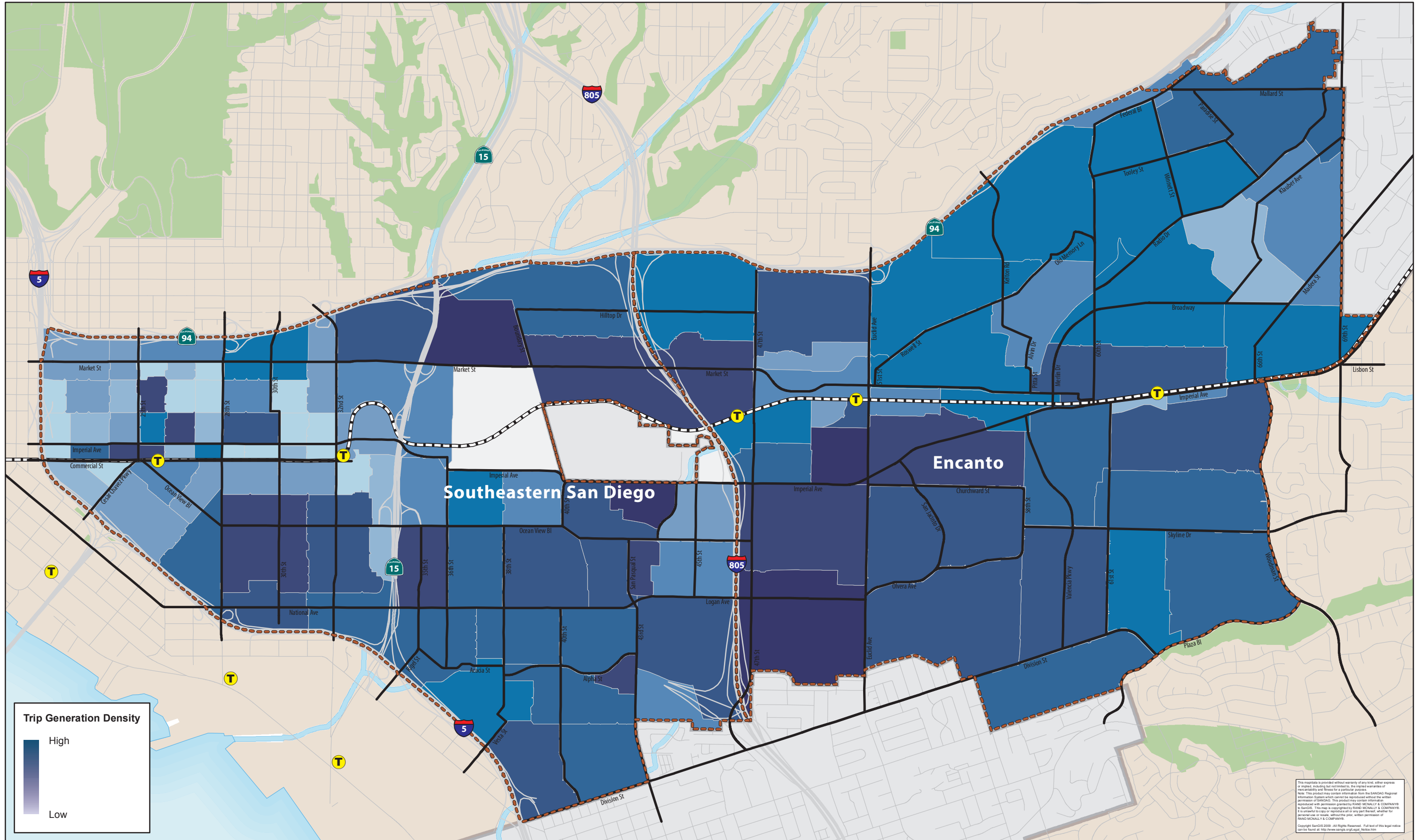


Figure 3-1: Trip Generation by TAZ - Existing Conditions

### 3.1.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Southeastern San Diego and Encanto Neighborhoods communities, including trips to/from and within the community. **Table 3-3** displays the total VMT generated within the Southeastern San Diego and Encanto Neighborhoods communities and the average trip length under both the Base Year conditions. VMT calculations for the Southeastern San Diego and Encanto Neighborhoods communities are included as **Appendix B**.

As shown, the Southeastern San Diego community, when compared to the San Diego Region, has significantly shorter average trip lengths and daily VMT by population under the Base Year condition (Average Trip Length of 1.39 miles vs. 5.18 miles; VMT of 5.10 miles vs. 27.30 miles, respectively).

The Encanto Neighborhoods community, when compared to the San Diego Region, has significantly shorter average trip length and daily VMT by population under the Base Year condition (Average Trip Length of 2.01 miles vs. 5.18 miles; VMT of 4.30 miles vs. 27.30 miles, respectively).

Table 3-3  
Vehicle Miles Traveled (VMT) Comparison  
Existing Conditions

Measure	Southeastern San Diego	Encanto Neighborhoods	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	291,677	206,790	85,331,631
Total # of Auto Trips	210,065	102,915	16,458,692
Average Trip Length* (miles)	1.39	2.01	5.18
Population	56,847	48,648	3,130,717
Daily VMT by Population (miles)	5.1	4.3	27.3

Source: SANDAG, Chen Ryan Associates; June 2015

Note:

\*Average trip length is estimated by dividing the total VMT by the total # of auto trips.

### 3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5, I-805, I-15, and SR-94, as well as numerous arterials and local streets. Several roadways outside the boundary of Southeastern San Diego were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies.

**Figure 3-2** displays the existing functional classifications for study area roadways. Each of these study area roadways is also described below.



# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

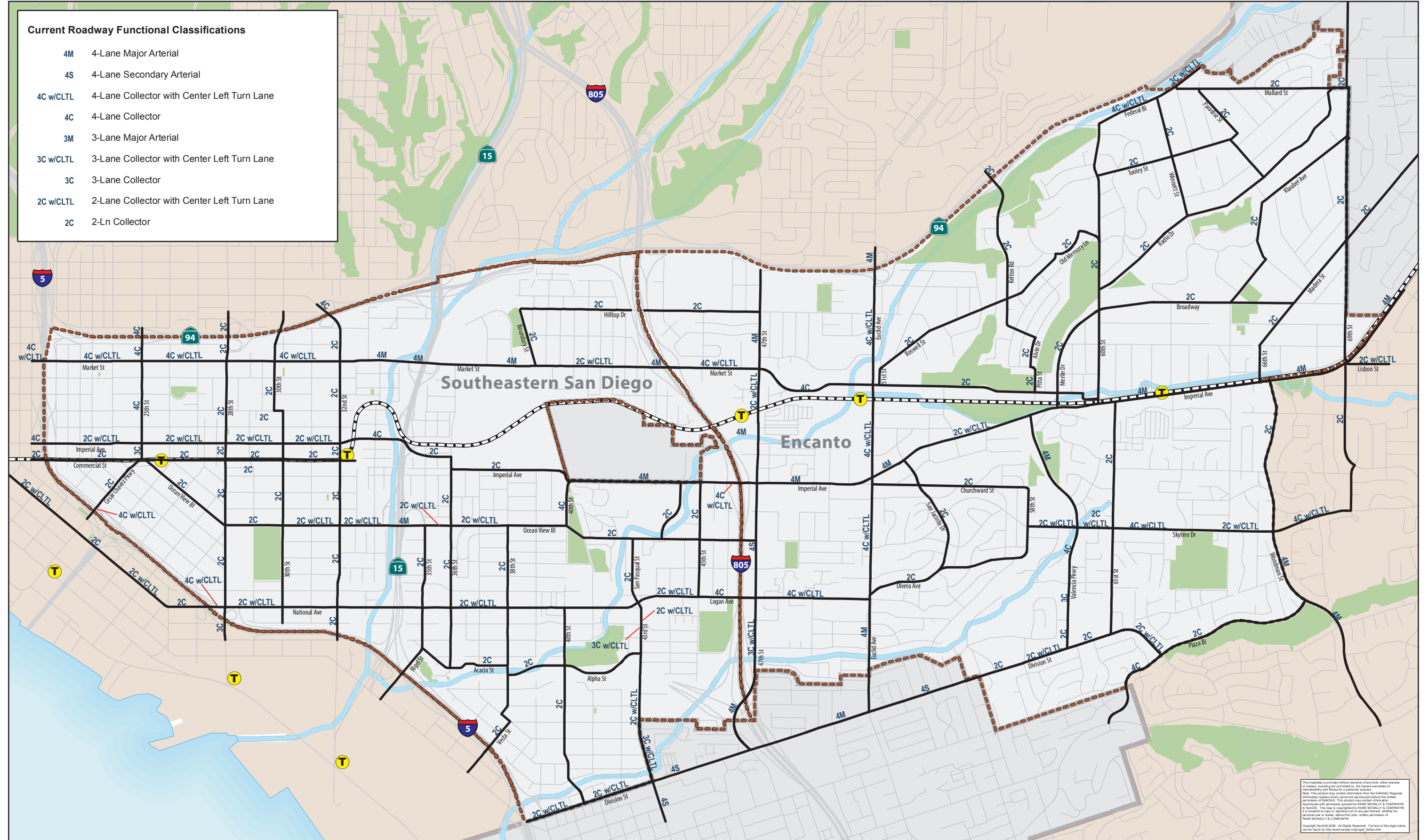


Figure 3-2: Existing Conditions Roadway Network

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### North-South Roadways

*Cesar Chavez Parkway* provides a direct connection between Barrio Logan and the 25<sup>th</sup> Street & Commercial Street Trolley Station in Southeastern San Diego. It runs diagonally from Barrio Logan to Southeastern San Diego, terminating in the east at a 5-legged intersection with 25<sup>th</sup> Street, Commercial Street, and Ocean View Boulevard. Cesar Chavez Parkway is 2-lane roadway between Commercial Street and the I-5 NB Ramps, and a 4-lane roadway between the I-5 NB Ramps and SR-75 On-Ramps/Logan Avenue. Both segments have a posted speed limit of 25 mph with parallel on-street parking, sidewalks and no bicycle facility or bus routes along these segments.

*25<sup>th</sup> Street* runs from Golden Hill in the north to Commercial Street in the south. This roadway is 4-lanes from SR-94 to Imperial Avenue, and 3-lanes from Imperial Avenue to Commercial Street. It currently has a posted speed limit of 30 mph, sidewalks and the Route 3 bus service that runs from Market Street to Commercial Street. Most of 25<sup>th</sup> Street has on-street parallel parking.

*28<sup>th</sup> Street* runs from Golden Hill in the north to Barrio Logan in the south. This roadway has 2-lanes from SR-94 to National Avenue, and 3-lanes (2 NB & 1 SB) along the segment south of National Avenue. It currently has a posted speed limit of 30 mph, sidewalks, and a Class III Bike Route from SR-94 to Ocean View Boulevard. There is no transit service along 28<sup>th</sup> Street. This roadway segment has on-street parallel parking on both sides of the street.

*30<sup>th</sup> Street* runs from Golden Hill in the north to Barrio Logan in the south. This roadway has 2-lanes and a current posted speed limit of 25 mph. There are sidewalks along this roadway segment, and no bicycle facilities or transit service. 30<sup>th</sup> Street has parallel on-street parallel parking on both sides of the street.

*Broadway/32<sup>nd</sup> Street* runs from SR-94 WB Ramps to the EB Ramps. This segment is 4-lanes with parallel parking on both sides of the street and no sidewalks, bicycle facility or transit service. The posted speed limit is 30 mph.

*32<sup>nd</sup> Street* runs from Golden Hill to Barrio Logan through Southeastern San Diego. It has 2-lanes and a posted speed limit of 30 mph. There is parallel on-street parking, sidewalks, and no bicycle facility or transit service.

*35<sup>th</sup> Street/Rigel Street* runs from Ocean View Boulevard to I-5 in the south, where it becomes Rigel Street in Barrio Logan. This roadway is 2-lanes with parallel parking on both sides, sidewalks and no bicycle facilities or transit service. Its posted speed limit is 25 mph.

*36<sup>th</sup> Street* runs from Imperial Avenue south to Acacia Street near the Chollas Creek and I-5. It is a 2-lane roadway with a posted speed limit of 25 mph and parallel parking on both sides of the street. 36<sup>th</sup> Street has sidewalks, but no bicycle facility or transit service.

*38<sup>th</sup> Street* runs from Ocean View Boulevard south to Acacia Street. It provides a north-south connection across the Chollas Creek. This roadway has 2-lanes and a posted speed limit of 25

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mph. There is parallel parking on both sides of the street, as well as sidewalk. There is no bicycle facility or transit service along this roadway.

*Vesta Street* runs from Acacia Street to Main Street in Barrio Logan with an underpass at I-5. It is a 2-lane roadway with a posted speed limit of 25 mph. There is currently parallel parking on both sides of the street and sidewalks. There is also a Class III Bike Route along this segment, but no transit service.

*40<sup>th</sup> Street* runs from Imperial Avenue to Division Street at the Southeastern San Diego border with National City, with a gap between T Street and Logan Avenue. The segment from Imperial Avenue to Ocean View Boulevard is 4-lanes with parking and sidewalks on both sides of the street. The segment from Ocean View Boulevard to National Avenue to Division Street is a 2-lane roadway with parking and sidewalks. Both study segments have a posted speed limit of 25 mph. There are no bicycle facilities or transit services along this roadway.

*Boundary Street* is a 2-lane roadway that runs from Hilltop Drive to Market Street to the east of the Costco shopping center. The posted speed limit is 25 mph and parallel parking is provided along with sidewalks. There are no bicycle facilities or transit services along this roadway segment.

*San Pasqual Drive* is a 2-lane roadway that runs from Ocean View Boulevard to Logan Avenue along the Chollas Creek. The roadway has a posted speed limit of 25 mph. This roadway has parking on both sides of the street as well as sidewalks, but no bicycle facility or transit service. There is however a recently built soft-surface trail along this roadway that provides for recreation and leisure, and access to Chollas Creek.

*43<sup>rd</sup> Street* runs from Logan Avenue south to Division Street at the Southeastern San Diego border with National City. The roadway varies from 2-lanes with a center-left-turn lane, to 3-lanes with a center-left-turn-lane. This study roadway has a posted speed limit of 30 mph. A relatively short portion of this study roadway does not allow parking. There are sidewalks along the roadway, as well as transit service provided by Route 955. There are no bicycle facilities along this study roadway.

*Highland Avenue* is located in National City and provides the continuation of 43<sup>rd</sup> Street from Southeastern San Diego. It is a 4-lane roadway with a center-left-turn-lane and on-street parallel parking. This study segment has sidewalks, but no bicycle facility or transit service. The posted speed limit is 35 mph.

*45<sup>th</sup> Street* is a 2-lane roadway with a 30 mph posted speed limit. There are missing sidewalks along the eastside (northbound) of this roadway between Imperial Avenue and Benfield Court. Bicycle facilities and transit service are not provided. The portion of this roadway that is part of the Circulation Element runs between Imperial Avenue and Logan Avenue.

*47<sup>th</sup> Street* runs between SR-94 and Division Street within the study area. This roadway is a 4-lane roadway from SR-94 to Market Street, 2-lane from Market Street to Imperial Avenue, 4-lane

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from Imperial Avenue to Logan Avenue, 3-lane from Logan Avenue to the I-805 NB Ramps, and 4-lane from I-805 NB Ramps to Division Street. Posted speed limits range from 30 mph to 40 mph. Parallel parking is allowed on both side of this roadway within the study area. There are sidewalks along the majority of this roadway with missing sidewalks along the north/west side between Logan Avenue and Division Street. There is no bicycle facility currently located along this roadway. Transit services are provided by Route 13 between SR-94 and Market Street and Routes 3 and 955 between Imperial Avenue and Logan Avenue. The 47<sup>th</sup> Street Trolley Station serving the Orange Line is located just west of 47<sup>th</sup> Street.

*Euclid Avenue* runs between SR-94 and Division Street within the study area. This roadway is a 4-lane roadway with a posted speed limit of 35 mph. There are sidewalks along the majority of this facility, as well as Class II bike lanes from Imperial Avenue to Cervantes Avenue. Transit services are available along Euclid Avenue via a combination of Routes 3, 13, 916/917, 955 and 960. The Euclid Avenue Trolley Station serving the Orange Line is located just west of Euclid Avenue.

*51<sup>th</sup> Street* runs from Roswell Street to Market Street as a 2-lane roadway with on-street parking and sidewalk. There are bicycle facilities along this roadway. The posted speed limit is 25 mph. Transit services are available via Route 916/917.

*San Jacinto Drive* runs from Imperial Avenue to Olvera Avenue as a 2-lane roadway with on-street parking and sidewalk. There are no transit service or bicycle facilities along this roadway. The posted speed limit is 25 mph.

*Bayview Heights Drive* runs from SR-94 WB Ramps to SR-94 EB Ramps as a continuation of Kelton Road. This roadway is a 2-lane roadway with missing sidewalk on the eastern side of the road. There are no transit services, on-street parking, or bicycle facilities along this roadway. The posted speed limit is 30 mph.

*Kelton Road* runs from Bayview Heights Way/SR-94 EB Ramps to Alvin Street as a 2-lane roadway with on-street parking and sidewalk along the majority of the roadway. There are no transit service or bicycle facilities along this roadway. The posted speed limit is 30 mph.

*Alvin Street* runs from Kelton Road to Pitta Street as a 2-lane roadway with on-street parking and sidewalk. There are no transit service or bicycle facilities along this roadway. The posted speed limit is 25 mph.

*Pitta Street* runs from Alvin Street to Market Street as a 2-lane roadway with parallel on-street parking along the eastern side of the roadway and missing sidewalk along a section of this roadway. There are bicycle facilities along this roadway. The posted speed limit is 25 mph. Transit services are available via Route 916/917.

*Merlin Drive* runs from Broadway to Imperial Avenue as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.



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*Valencia Parkway* runs from Imperial Avenue in the north to Division Street in the south. This roadway is a 4-lane roadway from Imperial Avenue to Cervantes Avenue, 3-lane from Cervantes Avenue to Wesmead Street, and 2-lane from Wesmead Street to Division Street. Posted speed limits range from 25 mph to 40 mph. On-street parking as well as sidewalks are available on the majority of this roadway, although sidewalks are missing along a relatively short section of this roadway. No transit services are available along this facility, however Class II bike lanes and Class III bike routes exist along Valencia Parkway, between Imperial Avenue and Skyline Drive.

*60<sup>th</sup> Street* runs from Federal Boulevard to Imperial Avenue as a 2-lane roadway with on-street parking and a posted speed limit of 35 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*61<sup>st</sup> Street* runs from Imperial Avenue to Division Street as a 2-lane roadway with on-street parking and a posted speed limit of 30 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*Winnett Street* runs from Federal Boulevard to Radio Drive as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*Paradise Street* runs from Mallard Street to Radio Drive as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*Madera Street* runs from Massachusetts Avenue in Lemon Grove to Akins Avenue as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on the west side of this roadway between Massachusetts Avenue and 69<sup>th</sup> Street, as well as along the east side between 69<sup>th</sup> Street and Akins Avenue. There are no bicycle facilities along this roadway. Transit services are available via Route 916/917.

*Woodman Street* runs from Imperial Avenue in the north to Paradise Valley Road in the south. This roadway is a 2-lane roadway from Imperial Avenue to Skyline Drive and a 4-lane roadway from Skyline Drive to Paradise Valley Road. Posted speed limits range from 35 mph to 40 mph. On-street parking as well as sidewalks are available on the majority of this roadway, although sidewalks are missing along a relatively short section of this roadway. Class II bike lanes are available on a short portion between Skyline Drive and Plaza Boulevard. Transit services are provided via Route 961.

*69<sup>th</sup> Street* runs from San Miguel Avenue to Skyline Drive as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. A short segment of the 69<sup>th</sup> Street, between Evelyn Street and Broadway Avenue, is an unpaved and not accessible to vehicles. Sidewalks are missing along the majority of this roadway with the exception of the segment between Imperial Avenue and Skyline Drive. There are no bicycle facilities or transit services along this roadway.



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## East-West Roadways

*Hilltop Drive* is a 2-lane roadway with a 25 mph posted speed limit. There is parallel parking along this study roadway, as well as sidewalks. There are no bicycle facilities or transit services on Hilltop Drive. The roadway runs between Boundary Street and I-805.

*Market Street* runs the entire length of Southeastern San Diego, from 17<sup>th</sup> Street to I-805. This roadway is 4 lanes with a center-left-turn-lane, with the exception of a short segment (less than half of a mile) between Boundary Street and Denby Street which generally has 2 travel lanes with a center-left-turn-lane. Market Street has a posted speed limit of 30 mph. There are sidewalks along the entire length of this roadway and bicycle facilities along a portion, between 32<sup>nd</sup> Street and I-805. There is also transit service provided by the Route 3 and Route 5.

*Imperial Avenue* runs the entire length of Southeastern San Diego, from 17<sup>th</sup> Street to I-805. This roadway varies from 4-lanes with and without a median, to 2-lanes with and without a median. Posted speeds range from 30 to 40 mph. There is on-street parking and sidewalks along a majority of this study roadway, although not all. Bus transit service is provided by the Route 4. A portion of Imperial Avenue, between 40<sup>th</sup> Street and 45<sup>th</sup> Street, generally has bicycle lanes, and while sharrows are marked between the I-805 NB Ramps and San Jacinto Drive.

*Commercial Street* runs from 17<sup>th</sup> Street to 32<sup>nd</sup> Street. This roadway is a 2-lane roadway with a 25 mph posted speed limit. The Orange Line and bus Route 3 run along Commercial Street. There is parking along the entire study segment with sidewalks, but no bicycle facility.

*Ocean View Boulevard* runs from 25<sup>th</sup> Street to 47<sup>th</sup> Street. This roadway varies from 2-lanes to 4-lanes, and has a posted speed limit of 30 mph. There is on-street parking and sidewalks along the entire length of this study roadway, as well as Class III Bike Route along a majority of the study segment. The Route 3 runs along this segment of Ocean View Boulevard.

*National Avenue* runs north-south through Barrio Logan, from Commercial Street to the I-5 SB Off-ramp at 27<sup>th</sup> Street, then runs east-west through Southeastern San Diego from I-5 to 43<sup>rd</sup> Street. This roadway varies from 2-lanes with center-left-turn-lane to 4-lanes, and has a posted speed limit of 30 mph. There is on-street parking and sidewalks along the majority of this study roadway, as well as transit service provided by Route 11. There is no bicycle facility along this study segment.

*Logan Avenue* within in SESD runs from 43<sup>rd</sup> Street to 47<sup>th</sup> Street. This roadway varies from 2-lanes to 4-lanes, and has a posted speed limit of 30 to 35 mph. There is on-street parking along the entire length of this study roadway, as well as sidewalks, with the exception of a section between 43<sup>rd</sup> Street and 47<sup>th</sup> Street. The Route 11 runs along this segment of Logan Avenue. There is no bicycle facility along this roadway.

*Acacia Street* runs from 36<sup>th</sup> Street to 38<sup>th</sup> Street as a 2-lane roadway with on-street parking and sidewalks. There are no bicycle facilities or transit service along this roadway. The posted speed limit is 25 mph.

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*Alpha Street* runs from 38<sup>th</sup> Street to 43<sup>rd</sup> Street as a 2-lane roadway with on-street parking and sidewalks. There are no bicycle facilities or transit service along this roadway. The posted speed limit is 25 mph.

*Division Street* runs from Main Street to Osborn Street within the City of National City. The roadway varies from 2-lanes to 4-lanes with a posted speed limit of 30 mph. There is on-street parking and sidewalks on both sides of the street, but there is no bicycle facility or transit service.

*Mallard Street* is a 2-lane roadway with a 30 mph posted speed limit between Federal Boulevard and 69<sup>th</sup> Street. Parallel parking, as well as sidewalks are available along the majority of the roadway. There are no bicycle facilities or transit services on Mallard Street.

*Federal Boulevard* runs from SR-94 Ramps in the west to MacArthur Drive in the east within the study area. This roadway varies from a 4-lane roadway with a center left-turn lane to a 3-lanes roadway with a center left-turn lane. Posted speed limits range from 40 to 45 mph. On-street parking and sidewalks are available along a majority of this study roadway. There are no transit services along Federal Boulevard, however Class II bike lanes are available between 60<sup>th</sup> Street and MacArthur Drive.

*Tooley Street* is a 2-lane roadway with a 25 mph posted speed limit between 60<sup>th</sup> Street and Paradise Street. Parallel parking, as well as sidewalks are available along the majority of the roadway. There are no bicycle facilities or transit services on Tooley Street.

*Hilltop Drive* is a 2-lane roadway with a 25 mph posted speed limit between I-805 and 47<sup>th</sup> Street. Parallel parking, as well as sidewalks are available along this facility. There are no bicycle facilities or transit services on Hilltop Drive.

*Roswell Street* runs from 51<sup>st</sup> Street to Old Memory Lane as a 2-lane roadway with on-street parking and a posted speed limit of 30 mph. Sidewalks are available on both sides of this roadway as well as transit services via Route 916/917. There is no bicycle facility along Roswell Street.

*Old Memory Lane* runs from Roswell Street to 60<sup>th</sup> Street as a 2-lane roadway with a posted speed limit of 25 mph. Parallel parking, as well as sidewalks are available along this facility. There are no transit service or bicycle facilities along this roadway.

*Radio Drive* runs from 60<sup>th</sup> Street to Mallard Street as a 2-lane roadway with no on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*Klauber Avenue* runs from Broadway to 69<sup>th</sup> Street as a 2-lane roadway with on-street parking and a posted speed limit of 25 mph. Sidewalks are missing on both sides along a portion of this roadway. There are no transit service or bicycle facilities along this roadway.

*Broadway* runs from 60<sup>th</sup> Street to Madera Street as a 2-lane roadway with on-street parking and a posted speed limit of 30 mph. Sidewalks are available along the majority of this roadway, as well as transit services via Route 916/917. There are no bicycle facilities along Broadway.

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*Market Street* runs from I-805 to 60<sup>th</sup> Street in Encanto Neighborhoods. This roadway is a 4-lane roadway from I-805 to Euclid Avenue and a 2-lane roadway from Euclid Avenue to 60<sup>th</sup> Street. East of Iona Drive, Market Street change to Akins Avenue. Parallel on-street parking are available along the majority of the roadway. Sidewalks are available along the majority of this roadway with the exception of a relatively small segment between Euclid Avenue and 60<sup>th</sup> Street. Transit services are available along sections Market Street via Routes 5, 13, and 916/917. The Orange Line Trolley runs parallel to Market Street and provides convenient access via the nearby 47<sup>th</sup> Street Trolley Station, Euclid Avenue Trolley Station, and the 62<sup>nd</sup> Street/Encanto Neighborhoods Trolley Station. Class II bike lanes on the I-805 overpass and Class III bike routes from I-805 NB Ramps to Euclid Avenue are located on Market Street. The posted speed limits vary between 25 mph and 35 mph.

*Imperial Avenue* runs the entire length of Encanto Neighborhoods, from I-805 to Viewcrest Drive as a 4-lane roadway with posted speed limits range 40 to 50 mph. There is on-street parking and sidewalks along a majority of this study roadway. Bus transit service is provided via Routes 4 and 955. Class II bike lanes and Class III (sharrows) bike routes exist along the majority of Imperial Avenue within the study area.

*Lisbon Street* runs from Imperial Avenue to 71<sup>st</sup> Street as a 2-lane roadway with no on-street parking and a posted speed limit of 35 mph. Sidewalks are available along this roadway, as well as transit services via Route 4. There is no bicycle facility along Lisbon Street within the study area.

*Churchward Street/58<sup>th</sup> Street* runs from Euclid Avenue to Skyline Drive as a 2-lane roadway with on-street parking, sidewalks on both side, and a posted speed limit of 25 mph. There are no bicycle facilities or transit services along Churchward Street/58<sup>th</sup> Street.

*Skyline Drive* runs from 58<sup>th</sup> Street in the west to 69<sup>th</sup> Street in the east. Skyline Drive varies between a 4-lane road with center left-turn lane and a 2-lane road with center left-turn lane. The posted speed limit is 35 mph along Skyline Drive within the study area. There are Class II bike lanes located from Valencia Parkway to 69<sup>th</sup> Street. Transit services are provided via Route 11.

*Logan Avenue* runs from 45<sup>th</sup> Street to Euclid Avenue Street as a 4-lane roadway with a posted speed limit of 35 mph. There is on-street parking along the entire length of this study roadway, as well as sidewalks. Transit services are available via Route 3, 11, and 955. There is no bicycle facility along this roadway.

*Olvera Avenue/58<sup>th</sup> Street* runs from Euclid Avenue to Skyline Drive as a 2-lane roadway with on-street parking and a posted speed limit of 30 mph. There are sidewalks along the majority of Olvera Avenue with the exception of a small portion along the south side. Transit services are available via Route 11. There is no bicycle facility along Olvera Avenue/58<sup>th</sup> Street.

*Division Street* runs from Palm Avenue in the west to 61<sup>st</sup> Street in the east. Division Street varies from a 4-lane roadway to a 2-lane roadway with a center left-turn lane. The posted speed limits range from 30 to 35 mph. There is on-street parking as well as sidewalk along the majority of Division Street. Transit services are available via Route 967. There is no bicycle facility along Division Street.

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*Plaza Boulevard* runs from Paradise Valley Road to Woodman Street. The roadway varies from 2-lanes to 4-lanes with posted speed limits between 30 and 40 mph. On-street parking and sidewalks are available on both sides of the road. There are no bicycle facilities or transit services along Plaza Boulevard.

It is common practice to consider existing and projected average weekday traffic volumes when planning for a community's mobility element.

**Figure 3-3** displays existing average daily traffic volumes for study roadway segments, along with the current LOS.



# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

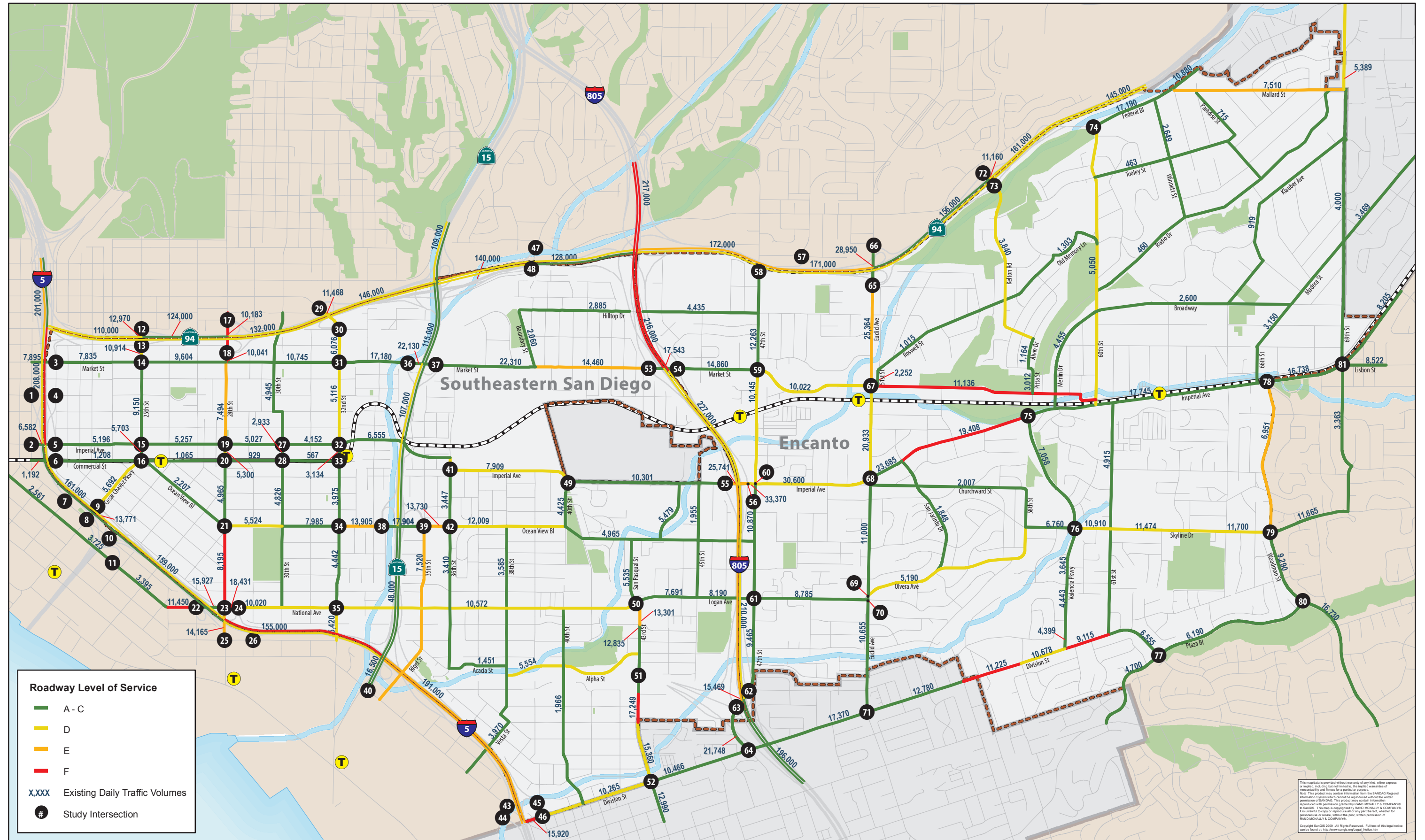


Figure 3-3: Existing Conditions Roadway Traffic Volumes and Level of Service

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**Table 3-4** displays existing roadway segment ADT and LOS for Southeastern San Diego and Encanto Neighborhoods. The source and date for each count used to calculate existing LOS is also provided in this table. **Appendix C** contains the average daily traffic counts utilized in this report.

As shown in the tables, there are a total of twenty-three (23) roadway segments within Southeastern San Diego and Encanto Neighborhoods that are operating at LOS E or F, with eleven (11) roadway segments located within Southeastern San Diego, eight (8) roadway segments within Encanto Neighborhoods, two (2) segments within both Southeastern San Diego and Encanto Neighborhoods, and two (2) segments within the Southeastern San Diego's sphere of influence (both in Barrio Logan), they are as follow:

*Southeastern San Diego*

- 39. Ocean View Boulevard, between 32nd Street and I-15 SB Ramps (LOS E);
- 41. Ocean View Boulevard, between I-15 NB Ramps and 36th Street (LOS E);
- 49. National Avenue, between 28th Street and I-5 NB Ramps (LOS F);
- 57. Division Street, between Main Street and Osborn Street (LOS F);
- 72. 28th Street, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);
- 73. 28th Street, between SR-94 EB Ramps and Market Street (LOS F);
- 74. 28th Street, between Market Street and Imperial Avenue (LOS E);
- 77. 28th Street, between Ocean View Boulevard and National Avenue (LOS F);
- 89. 35th Street/Rigel Street, between Ocean View Boulevard and Main Street (LOS E);
- 99. 43rd Street, between Logan Avenue and Newton Avenue (LOS E); and
- 101. 43rd Street, between Beta Street and Delta Street (LOS F).

*Encanto Neighborhoods*

- 14. Market Street/Akins Avenue, between Euclid Avenue and 60th Street (LOS F);
- 27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway (LOS F);
- 62. Division Street, between Harbison Avenue and 58th Street (LOS F);
- 64. Division Street, between Valencia Parkway and 61st Street (LOS F);
- 105. Mallard Street, between Federal Boulevard and 69th Street (LOS E);
- 131. Euclid Avenue, between SR-94 EB Ramps & Market Street (LOS E);
- 137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F); and
- 152. Woodman Street, Imperial Avenue and Skyline Drive (LOS E).

*Southeastern San Diego & Encanto Neighborhoods*

- 10. Market Street, between Boundary Street and I-805 SB Ramps (LOS E); and
- 23. Imperial Avenue, between I-805 SB Ramps and I-805 NB Ramps (LOS E);

*Sphere of Influence*

- 47. National Avenue, between 26th Street and 27th Street/I-5 SB Off-Ramps (LOS F); and
- 78. 28th Street, between National Avenue and Boston Avenue (LOS E).

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
1	Hilltop Drive	Boundary Street & I-805	3/29/2011	City of SD (MC0207-1)	2-Ln Collector	8,000	2,885	0.36	B	Southeastern
2	Hilltop Drive	I-805 & 47th Street	3/10/2011	City of SD (MC0208-1)	2-Ln Collector	8,000	4,435	0.55	C	Encanto
3	Market Street	17th Street & 19th Street	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	7,895	0.26	A	Southeastern
4	Market Street	19th Street & 25th Street	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	7,835	0.26	A	Southeastern
5	Market Street	25th Street & 28th Street	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	9,604	0.32	A	Southeastern
6	Market Street	28th Street & 32nd Street	11/9/2011	City of SD (MC1150-1)	4-Ln Collector w/ CLTL	30,000	10,745	0.36	B	Southeastern
7	Market Street	32nd Street & I-15 SB Ramps	11/9/2011	City of SD (MC1151-1)	4-Ln Major Arterial	40,000	17,180	0.43	B	Southeastern
8	Market Street	I-15 SB Ramps & I-15 NB Ramps	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	22,320	0.56	C	Southeastern
9	Market Street	I-15 NB Ramps & Boundary Street	1/31/2012	City of SD (MC0036-1)	4-Ln Major Arterial	40,000	22,310	0.56	C	Southeastern
10	Market Street	Boundary Street & I-805 SB Ramps	7/26/2010	City of SD (MC0620-10)	2-Ln Collector w/ CLTL	15,000	14,460	0.96	E	Southeastern
11	Market Street	I-805 SB Ramps & I-805 NB Ramps	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	17,543	0.44	B	Southeastern/ Encanto
12	Market Street	I-805 NB Ramps & 47th Street	5/24/2011	Euclid+ Market	4-Ln Collector w/CLTL	30,000	14,860	0.50	C	Encanto



**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
13	Market Street	47th Street & Euclid Avenue	5/24/2011	Euclid+ Market	4-Ln Collector	15,000	10,022	0.67	D	Encanto
14	Market Street/Akins Avenue	Euclid Avenue & 60th Street	5/24/2011	Euclid+ Market	2-Ln Collector	10,000	11,136	1.11	F	Encanto
15	Imperial Avenue	17th Street & 19th Street	5/25/2011	Commercial Imperial Corridor	4-Ln Collector	15,000	6,582	0.44	B	Southeastern
16	Imperial Avenue	19th Street & 25th Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector w/ CLTL	15,000	5,196	0.35	B	Southeastern
17	Imperial Avenue	25th Street & 28th Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector w/ CLTL	15,000	5,257	0.35	B	Southeastern
18	Imperial Avenue	28th Street & 30th Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector w/ CLTL	15,000	5,027	0.34	B	Southeastern
19	Imperial Avenue	30th Street & 32nd Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector w/ CLTL	15,000	4,152	0.28	A	Southeastern
20	Imperial Avenue	32nd Street & 36th Street	5/4/2011	City of SD (MC0262-1)	4-Ln Collector	15,000	6,555	0.44	B	Southeastern
21	Imperial Avenue	36th Street & 40th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	10,000	7,909	0.79	D	Southeastern
22	Imperial Avenue	40th Street & I-805 SB Ramps	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	10,301	0.26	A	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
23	Imperial Avenue	I-805 SB Ramps & I-805 NB Ramps	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	25,741	0.86	E	Southeastern/ Encanto
24	Imperial Avenue	I-805 NB Ramps & 47th Street	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	33,370	0.83	D	Encanto
25	Imperial Avenue	47th Street & Euclid Avenue	3/10/2011	City of SD (MC0221-1)	4-Ln Major Arterial	40,000	30,600	0.77	D	Encanto
26	Imperial Avenue	Euclid Avenue & San Jacinto Drive	1/25/2012	City of SD (MC0026-1)	4-Ln Major Arterial	40,000	23,685	0.59	C	Encanto
27	Imperial Avenue	San Jacinto Drive & Valencia Parkway	1/9/2013	City of SD	2-Ln Collector w/CLTL	15,000	19,408	1.29	F	Encanto
28	Imperial Avenue	Valencia Parkway & Woodman Street	1/24/2012	City of SD (MC0027-1)	4-Ln Major Arterial	40,000	17,745	0.44	B	Encanto
29	Imperial Avenue	Woodman Street & 69th Street	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	16,738	0.42	B	Encanto
30	Imperial Avenue	69th Street & Viewcrest Drive	1/24/2012	City of SD (MC0025-1)	4-Ln Major Arterial	40,000	8,205	0.21	A	Encanto (Skyline/ Paradise Hills)
31	Commercial Street	17th Street & 19th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	1,192	0.15	A	Downtown
32	Commercial Street	19th Street & 25th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	1,208	0.15	A	Southeastern
33	Commercial Street	25th Street & 28th Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	1,065	0.13	A	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
34	Commercial Street	28th Street & 30th Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	929	0.12	A	Southeastern
35	Commercial Street	30th Street & 32nd Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	567	0.07	A	Southeastern
36	Ocean View Boulevard	25th Street & 28th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	2,207	0.28	A	Southeastern
37	Ocean View Boulevard	28th Street & 30th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	5,524	0.69	D	Southeastern
38	Ocean View Boulevard	30th Street & 32nd Street	11/9/2011	City of SD (MC1162-1)	2-Ln Collector w/ CLTL	15,000	7,985	0.53	C	Southeastern
39	Ocean View Boulevard	32nd Street & I-15 SB Ramps	2/8/2012	City of SD (MC0070-1)	2-Ln Collector w/ CLTL	15,000	13,905	0.93	E	Southeastern
40	Ocean View Boulevard	I-15 SB Ramps & I-15 NB Ramps	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	17,094	0.43	B	Southeastern
41	Ocean View Boulevard	I-15 NB Ramps & 36th Street	5/26/2011	City of SD (MC0301-1)	2-Ln Collector w/ CLTL	15,000	13,730	0.92	E	Southeastern
42	Ocean View Boulevard	36th Street & 40th Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/ CLTL	15,000	12,009	0.80	D	Southeastern
43	Ocean View Boulevard	40th Street & 47th Street	7/28/2011	City of SD (MC0638-1)	2-Ln Collector	8,000	4,965	0.62	C	Southeastern
44	National Avenue	Commercial Street & Beardsley Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/ CLTL	15,000	2,561	0.17	A	Barrio Logan
45	National Avenue	Beardsley Street & SR-75 Off-Ramp	11/9/2011	City of SD (MC1159-1)	2-Ln Collector	8,000	3,725	0.47	C	Barrio Logan

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
46	National Avenue	SR-75 Off-Ramp & 26th Street	11/9/2011	City of SD (MC1160-1)	2-Ln Collector w/ CLTL	15,000	3,395	0.23	A	Barrio Logan
47	National Avenue	26th Street & 27th Street/I-5 SB Off-Ramp	10/10 & 10/11/2012	NDS	2-Ln Collector	8,000	11,450	1.43	F	Barrio Logan
48	National Avenue	27th Street/I-5 SB Off-Ramp & 28th Street	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	15,927	0.53	C	Southeastern
49	National Avenue	28th Street & I-5 NB Ramps	10/25/2012	Euclid/National	2-Ln Collector w/ CLTL	15,000	18,431	1.23	F	Southeastern
50	National Avenue	I-5 NB Ramps & 32nd Street	10/25/2012	Euclid/National	2-Ln Collector w/ CLTL	15,000	10,020	0.67	D	Southeastern
51	National Avenue	32nd Street & 43rd Street	10/25/2012	Euclid/National	2-Ln Collector w/ CLTL	15,000	10,572	0.70	D	Southeastern
52	Logan Avenue	43rd Street & 45th Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/ CLTL	15,000	7,691	0.51	C	Southeastern
53	Logan Avenue	45th Street & 47th Street	7/28/2011	City of SD (MC0604-1)	4-Ln Collector	15,000	8,190	0.55	C	Southeastern/Encanto
54	Logan Avenue	47th Street & Euclid Avenue	1/31/2012	City of SD (MC0032-1)	4-Ln Collector w/CLTL	30,000	8,785	0.29	A	Encanto
55	Acacia Street	36th Street & 38th Street	10/10 & 10/11/2012	NDS	2-Ln Collector	8,000	1,451	0.18	A	Southeastern
56	Alpha Street	38th Street & 43rd Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	5,554	0.69	D	Southeastern
57	Division Street	Main Street & Osborn Street	6/21/2011	City of SD (MC0500-1)	2-Ln Collector w/ CLTL	15,000	15,920	1.06	F	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
58	Division Street	Osborn Street & Highland Avenue	2/24/2011	City of SD (MC0118-1)	2-Ln Collector w/ CLTL	15,000	10,265	0.68	D	Southeastern
59	Division Street	Highland Avenue & Palm Avenue	3/15 & 3/16/2011	National City	4-Ln Secondary Arterial	30,000	10,466	0.35	B	National City
60	Division Street	Palm Avenue & Euclid Avenue	3/15 & 3/16/2011	National City	4-Ln Major Arterial	40,000	17,370	0.43	B	National City
61	Division Street	Euclid Avenue & Harbison Avenue	3/15 & 3/16/2011	National City	4-Ln Secondary Arterial	30,000	12,780	0.43	B	National City
62	Division Street	Harbison Avenue & 58th Street	3/22/2011	City of SD (MC0191-1)	2-Ln Collector	8,000	11,225	1.40	F	Encanto
63	Division Street	58th Street & Valencia Parkway	10/9 & 10/10/2012	NDS	2-Ln Collector w/CLTL	15,000	10,678	0.71	D	Encanto
64	Division Street	Valencia Parkway & 61st Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	9,115	1.14	F	Encanto
65	Division Street	61st Street & Plaza Boulevard	3/22/2011	City of SD (MC0205-1)	2-Ln Collector w/CLTL	15,000	6,555	0.44	B	Encanto
66	Cesar Chavez Parkway	Commercial Street & I-5 NB Ramps	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	5,692	0.71	D	Southeastern
67	Cesar Chavez Parkway	I-5 NB Ramps & SR-75 On-Ramp/Logan Avenue	10/9 & 10/10/2012	NDS	4-Ln Collector w/ CLTL	30,000	13,771	0.46	B	Barrio Logan
68	25th Street	SR-94 WB Off-Ramp & SR-94 EB On-Ramp	10/9 & 10/10/2012	NDS	4-Ln Collector	15,000	12,970	0.86	D	Southeastern
69	25th Street	SR-94 EB On-Ramp & Market Street	10/9 & 10/10/2012	NDS	4-Ln Collector	15,000	10,914	0.73	D	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
70	25th Street	Market Street & Imperial Avenue	11/8/2011	City of SD (MC1095-1)	4-Ln Collector	15,000	9,150	0.61	C	Southeastern
71	25th Street	Imperial Avenue & Commercial Street	5/25/2011	Commercial Imperial Corridor	3-Ln Collector	15,000	5,703	0.38	B	Southeastern
72	28th Street	SR-94 WB Ramps & SR-94 EB Ramps	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	10,183	1.27	F	Southeastern
73	28th Street	SR-94 EB Ramps & Market Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	10,041	1.26	F	Southeastern
74	28th Street	Market Street & Imperial Avenue	10/10 & 10/11/2012	NDS	2-Ln Collector	8,000	7,494	0.94	E	Southeastern
75	28th Street	Imperial Avenue & Commercial Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	5,300	0.66	D	Southeastern
76	28th Street	Commercial Street & Ocean View Boulevard	8/9/2011	City of SD (MC0718-1)	2-Ln Collector	8,000	4,965	0.62	C	Southeastern
77	28th Street	Ocean View Boulevard & National Avenue	10/25/2012	Euclid/National	2-Ln Collector	8,000	8,195	1.02	F	Southeastern
78	28th Street	National Avenue & Boston Avenue	1/17/2011	City of SD (MC1098-1)	3-Ln Collector	15,000	14,165	0.94	E	Barrio Logan
79	30th Street	E Street & Imperial Avenue	8/9/2011	City of SD (MC0719-1)	2-Ln Collector	8,000	4,945	0.62	C	Southeastern
80	30th Street	Imperial Avenue & Commercial Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	2,993	0.37	B	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
81	30th Street	Commercial Street & National Avenue	10/31/2012	Euclid/National	2-Ln Collector	8,000	4,826	0.60	C	Southeastern
82	Broadway/32nd Street	SR-94 WB Ramps & SR-94 EB On-Ramp/F Street	10/9 & 10/10/2012	NDS	4-Ln Collector	15,000	11,468	0.76	D	Southeastern
83	32nd Street	SR-94 EB On-Ramp/F Street & Market Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	6,076	0.76	D	Southeastern
84	32nd Street	Market Street & Imperial Avenue	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	5,116	0.64	D	Southeastern
85	32nd Street	Imperial Avenue & Commercial Street	5/25/2011	Commercial Imperial Corridor	2-Ln Collector	8,000	3,134	0.39	B	Southeastern
86	32nd Street	Commercial Street & Ocean View Boulevard	11/9/2011	City of SD (MC1104-1)	2-Ln Collector	8,000	3,975	0.50	C	Southeastern
87	32nd Street	Ocean View Boulevard & National Avenue	10/25/2012	Euclid/National	2-Ln Collector	8,000	4,442	0.56	C	Southeastern
88	32nd Street	National Avenue & Boston Avenue	12/9/2011	City of SD (MC1103-1)	2-Ln Collector	8,000	5,420	0.68	D	Southeastern
89	35th Street/Rigel Street	Ocean View Boulevard & Main Street	3/8/2011	City of SD (MC097-11)	2-Ln Collector	8,000	7,520	0.94	E	Southeastern
90	36th Street	Imperial Avenue & Ocean View Boulevard	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	3,447	0.43	B	Southeastern
91	36th Street	Ocean View Boulevard & Acacia Street	1/28/2010	City of SD (MC0021-1)	2-Ln Collector	8,000	3,410	0.43	B	Southeastern
92	38th Street	Ocean View Boulevard & Acacia Street	8/9/2011	City of SD (MC0727-1)	2-Ln Collector	8,000	3,585	0.45	C	Southeastern



**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
93	Vesta Street	Acacia Street & Main Street	1/31/2012	City of SD (MC0060-1)	2-Ln Collector	8,000	3,970	0.50	C	Southeastern
94	40th Street	Imperial Avenue & Ocean View Boulevard	3/10/2011	City of SD (MC0203-1)	4-Ln Collector	15,000	4,425	0.30	A	Southeastern
95	40th Street	National Avenue & Division Street	10/24/2012	Euclid/National	2-Ln Collector	8,000	1,966	0.25	A	Southeastern
96	Boundary Street	Hilltop Drive & Market Street	3/10/2011	City of SD (MC0188-1)	2-Ln Collector	8,000	2,060	0.26	A	Southeastern
97	San Pasqual Drive	Imperial Avenue & Ocean View Boulevard	10/9 & 10/10/2012	NDS	2-Ln Collector	10,000	5,479	0.55	B	Southeastern
98	San Pasqual Drive	Ocean View Boulevard & Logan Avenue	10/9 & 10/10/2012	NDS	2-Ln Collector	10,000	5,535	0.55	C	Southeastern
99	43rd Street	Logan Avenue & Newton Avenue	10/24/2012	Euclid/National	2-Ln Collector w/CLTL	15,000	13,301	0.89	E	Southeastern
100	43rd Street	Newton Avenue & Beta Street	8/9/2011	City of SD (MC0730-1)	3-Ln Collector w/CLTL	22,500	12,835	0.57	C	Southeastern
101	43rd Street	Beta Street & Delta Street	10/10 & 10/11/2012	NDS	2-Ln Collector w/CLTL	15,000	17,249	1.15	F	Southeastern
102	43rd Street/Highland Avenue	Delta Street & Division Street	8/9/2011	City of SD (MC0731-1)	3-Ln Collector w/CLTL	22,500	15,360	0.68	D	Southeastern
103	Highland Avenue	Division Street & 4th Street	4/6 & 4/7/2011	National City	4-Ln Secondary Arterial	30,000	12,990	0.43	B	National City
104	45th Street	Imperial Avenue & Logan Avenue	8/11/2011	City of SD (MC0732-1)	2-Ln Collector	8,000	1,955	0.24	A	Southeastern

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
105	Mallard Street	Federal Boulevard & 69th Street	3/22/2011	City of SD (MC0224-1)	2-Ln Collector	8,000	7,510	0.94	E	Encanto
106	Federal Boulevard	60th Street & Mallard Street	6/23/2011	City of SD (MC0514-1)	4-Ln Collector w/CLTL	30,000	17,190	0.57	C	Encanto
107	Federal Boulevard	Mallard Street & MacArthur Drive	1/31/2012	City of SD (MC0022-1)	3-Ln Collector w/CLTL	22,500	10,880	0.48	C	Encanto
108	Tooley Street	60th Street & Paradise Street	10/10 & 10/11/2012	NDS	2-Ln Collector	8,000	463	0.06	A	Encanto
109	Roswell Street	51st Street & Old Memory Lane	3/17/2011	City of SD (MC0168-1)	2-Ln Collector	8,000	1,015	0.13	A	Encanto
110	Old Memory Lane	Roswell Street & 60th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	1,303	0.16	A	Encanto
111	Radio Drive	60th Street & Mallard Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	460	0.06	A	Encanto
112	Klauber Avenue	Broadway & 69th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	919	0.11	A	Encanto
113	Broadway	60th Street & Madera Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	2,600	0.32	B	Encanto
114	Lisbon Street	Imperial Avenue & 71st Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/CLTL	15,000	8,522	0.57	C	Encanto (Skyline/Paradise Hills)
115	Churchward Street/58th Street	Euclid Avenue & Skyline Drive	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	2,007	0.25	A	Encanto

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
116	Skyline Drive	58th Street & Valencia Parkway	10/9 & 10/10/2012	NDS	2-Ln Collector w/CLTL	15,000	6,760	0.45	B	Encanto
117	Skyline Drive	Valencia Parkway & 61st Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/CLTL	15,000	10,910	0.73	D	Encanto
118	Skyline Drive	61st Street & Omeara Street	10/9 & 10/10/2012	NDS	2-Ln Collector w/CLTL	15,000	11,474	0.76	D	Encanto
119	Skyline Drive	Omeara Street & Woodman Street	3/22/2011	City of SD (MC0215-1)	2-Ln Collector w/CLTL	15,000	11,700	0.78	D	Encanto
120	Skyline Drive	Woodman Street & 69th Street	10/9 & 10/10/2012	NDS	4-Ln Collector w/CLTL	30,000	11,665	0.39	B	Skyline/ Paradise Hills
121	Olvera Avenue/58th Street	Euclid Avenue & Skyline Drive	3/22/2011	City of SD (MC0198-1)	2-Ln Collector	8,000	5,190	0.65	D	Encanto
122	Plaza Boulevard	Paradise Valley Road & Division Street	3/24/2011	City of SD (MC0225-1)	4-Ln Collector	15,000	4,700	0.31	A	Encanto
123	Plaza Boulevard	Division Street & Woodman Street	3/24/2011	City of SD (MC0214-1)	2-Ln Collector	10,000	6,190	0.62	B	Encanto
124	47th Street	SR-94 EB On-Ramp & Market Street	5/24/2011	Euclid+Market	4-Ln Collector w/CLTL	30,000	12,263	0.41	B	Encanto
125	47th Street	Market Street & Imperial Avenue	5/24/2011	Euclid+Market	2-Ln Collector w/CLTL	15,000	10,145	0.68	D	Encanto
126	47th Street	Imperial Avenue & Logan Avenue	2/9/2012	City of SD (MC0096-1)	4-Ln Collector w/CLTL	30,000	10,870	0.36	B	Encanto
127	47th Street	Logan Avenue & I-805 NB Ramps	1/31/2012	City of SD (MC0003-1)	3-Ln Collector w/CLTL	22,500	9,465	0.42	B	Encanto

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
128	47th Street	I-805 NB Ramps & I-805 SB Ramps	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	15,469	0.39	B	Encanto/ National City
129	47th Street/Palm Avenue	I-805 SB Ramps & Division Street	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	21,748	0.54	C	National City
130	Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	5/8/2012	SR 94/Euclid Traffic Operations Study	4-Ln Major Arterial	40,000	28,950	0.72	C	Encanto
131	Euclid Avenue	SR-94 EB Ramps & Market Street	5/24/2011	Euclid+Market	4-Ln Collector w/CLTL	30,000	25,364	0.85	E	Encanto
132	Euclid Avenue	Market Street & Imperial Avenue	5/24/2011	Euclid+Market	4-Ln Collector w/CLTL	30,000	20,933	0.7	D	Encanto
133	Euclid Avenue	Imperial Avenue & Logan Avenue	1/25/2012	City of SD (MC0021-1)	4-Ln Collector w/CLTL	30,000	11,000	0.37	B	Encanto
134	Euclid Avenue	Logan Avenue & Division Street	4/6 & 4/7/2011	National City	4-Ln Major Arterial	40,000	10,655	0.27	A	Encanto/ National City
135	51st Street	Market Street & Roswell Street	10/9 & 10/10/2012	NDS	2-Ln Collector	10,000	2,252	0.23	A	Encanto
136	San Jacinto Drive	Imperial Avenue & Olvera Avenue	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	1,848	0.23	A	Encanto
137	Bayview Heights Way	SR-94 WB Ramps & SR-94 EB Ramps	6/23/2011	City of SD (MC0469-1)	2-Ln Collector	10,000	11,160	1.12	F	Encanto
138	Kelton Road	SR-94 EB Ramps & Alvin Street	3/22/2011	City of SD (MC0222-1)	2-Ln Collector	8,000	3,840	0.48	D	Encanto
139	Alvin Street	Kelton Road & Pitta Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	1,164	0.15	A	Encanto

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
140	Pitta Street	Alvin Street & Market Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	3,013	0.38	B	Encanto
141	Merlin Drive	Broadway & Imperial Avenue	7/28/2011	City of SD (MC0615-1)	2-Ln Collector	8,000	4,455	0.56	C	Encanto
142	Valencia Parkway	Imperial Avenue & Skyline Drive	10/9 & 10/10/2012	NDS	4-Ln Major Arterial	40,000	7,059	0.18	A	Encanto
143	Valencia Parkway	Skyline Drive & Cervantes Avenue	3/22/2011	City of SD (MC0217-1)	4-Ln Collector	15,000	3,645	0.24	A	Encanto
144	Valencia Parkway	Cervantes Avenue & Wesmead Street	10/9 & 10/10/2012	NDS	3-Ln Collector	15,000	4,443	0.30	A	Encanto
145	Valencia Parkway	Wesmead Street & Division Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	4,399	0.55	C	Encanto
146	60th Street	Federal Boulevard & Imperial Avenue	10/10 & 10/11/2012	NDS	2-Ln Collector	8,000	5,050	0.63	D	Encanto
147	61st Street	Imperial Avenue & Division Street	3/22/2011	City of SD (MC0204-1)	2-Ln Collector	8,000	4,915	0.61	C	Encanto
148	Winnett Street	Federal Boulevard & Radio Drive	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	2,649	0.33	B	Encanto
149	Paradise Street	Mallard Street & Radio Drive	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	715	0.09	A	Encanto
150	Madera Street	Massachusetts Avenue & 69th Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	3,469	0.43	B	Lemon Grove
151	Madera Street/66th Street	69th Street & Akins Avenue	3/22/2011	City of SD (MC0223-1)	2-Ln Collector	8,000	3,150	0.39	B	Encanto

**Table 3-4  
Existing Roadway Segment Level of Service Results**

No.	Roadway	Segment	Count Date	Data Source	Existing Functional Classification	Capacity (LOS E)	Average Daily Traffic (ADT)	Volume to Capacity Ratio (V/C)	LOS (LOS)	Community / Jurisdiction
152	Woodman Street	Imperial Avenue & Skyline Drive	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	6,951	0.87	E	Encanto
153	Woodman Street	Skyline Drive & Plaza Boulevard	6/21/2011	City of SD (M0564-11)	4-Ln Major Arterial	40,000	9,290	0.23	A	Encanto
154	Woodman Street	Plaza Boulevard & Paradise Valley Road	5/26/2011	City of SD (MC0297-1)	4-Ln Major Arterial	40,000	16,730	0.42	B	Encanto (Skyline/Paradise Hills)
155	69th Street	San Miguel Avenue & Mallard Street	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	5,389	0.67	D	Lemon Grove
156	69th Street	Mallard Street & Imperial Avenue	3/22/2011	City of SD (MC0219-1)	2-Ln Collector	8,000	4,000	0.50	C	Encanto
157	69th Street	Imperial Avenue & Skyline Drive	10/9 & 10/10/2012	NDS	2-Ln Collector	8,000	3,363	0.42	B	Encanto (Skyline/Paradise Hills)

Source: NDS, City of San Diego, City of National City, Chen Ryan Associates; June 2015

Notes:

Bold letter indicates unacceptable LOS E or F.

CLTL = Center Left-Turn Lane.



In addition to the roadway segment daily LOS analysis presented above, arterial speed analysis was conducted along the Urban Streets using the HCM 2000 arterial analysis techniques. **Appendix D** displays the peak hour automobile arterial analysis outputs. **Table 3-5** displays the analysis results during the AM and PM peak hours, respectively, under Existing conditions.

Table 3-5  
Existing Arterial Analysis Along Urban Streets

Roadway	Segment	AM Peak Hour				PM Peak Hour				Community
		EB		WB		EB		WB		
		Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	
Market Street	19th Street & 25th Street	23.0	C	24.7	B	21.0	C	23.0	C	Southeastern
	25th Street & 28th Street	31.9	A	29.4	B	29.2	B	30.5	A	Southeastern
	28th Street & 32nd Street	21.2	C	21.8	C	15.5	D	21.1	C	Southeastern
	32nd Street & I-15 SB Ramps	13.0	E	18.4	C	8.5	F	23.6	C	Southeastern
	I-15 SB Ramps & I-15 NB Ramps	31.0	A	32.6	A	26.7	B	33.2	A	Southeastern
	I-15 NB Ramps & I-805 SB Ramps	17.8	D	16.6	D	17.1	D	13.4	E	Southeastern
	I-805 SB Ramps & I-805 NB Ramps	17.8	D	17.8	D	17.1	D	13.4	E	Encanto
	I-805 NB Ramps & 47th Street	22.3	C	20.8	C	20.5	C	21.4	C	Encanto
	47th Street & Euclid Avenue	27.9	B	23.0	C	25.5	B	25.4	B	Encanto
Imperial Avenue	17th Street & 19th Street	25.8	B	26.1	B	24.0	B	24.2	B	Southeastern
	19th Street & 25th Street	22.1	C	23.7	C	21.6	C	21.6	C	Southeastern
	25th Street & 28th Street	26.3	B	20.8	C	24.9	B	20.1	C	Southeastern
	28th Street & 30th Street	21.4	C	23.1	C	22.5	C	24.5	B	Southeastern
	30th Street & 32nd Street	22.0	C	23.4	C	21.5	C	23.4	C	Southeastern
	32nd Street & 36th Street	23.6	C	19.4	C	21.4	C	19.3	C	Southeastern
	36th Street & 40th Street	26.8	B	29.9	B	25.8	B	26.5	B	Southeastern
	40th Street & I-805 SB Ramps	23.4	C	13.5	E	21.7	C	16.5	D	Southeastern
	I-805 SB Ramps & I-805 NB Ramps	4.0	F	5.1	F	4.5	F	7.0	F	Southeastern
National Avenue	27th Street/I-5 SB Off-Ramp & 28th Street	25.3	B	17.9	D	24.1	B	15.6	D	Southeastern
	28th Street & I-5 NB Ramps	25.6	B	28.3	B	26.0	B	28.7	B	Southeastern
	I-5 NB Ramps & 32nd Street	23.9	C	19.9	C	23.2	C	21.3	C	Southeastern
	32nd Street & 43rd Street	23.9	C	19.9	C	23.2	C	22.5	C	Southeastern

**Table 3-5  
Existing Arterial Analysis Along Urban Streets**

Roadway	Segment	AM Peak Hour				PM Peak Hour				Community
		EB		WB		EB		WB		
		Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	
Logan Avenue	43rd Street & 45th Street	23.9	C	21.8	C	20.6	C	20.7	C	Southeastern
	45th Street & 47th Street	23.9	C	21.8	C	20.6	C	20.7	C	Southeastern
	45th Street & 47th Street	23.9	C	19.9	C	23.2	C	21.3	C	Encanto
	47th Street & Euclid Avenue	13.7	E	23.0	C	13.7	E	22.5	C	Encanto
47th Street	SR-94 EB On-Ramp & Market Street	30.2	B	25.0	C	30.2	B	24.6	C	Encanto
	Market Street & Imperial Avenue	24.0	C	22.5	C	25.3	C	19.7	C	Encanto
	Imperial Avenue & Logan Avenue	21.4	D	27.8	C	23.9	C	29.2	B	Encanto
	Logan Avenue & I-805 NB Ramps	24.7	C	27.1	C	27.7	C	35.4	A	Encanto
	I-805 NB Ramps & I-805 SB Ramps	25.2	C	23.0	C	24.8	C	15.5	E	Encanto
Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	26.2	B	26.2	B	24.1	B	24.1	B	Encanto
	SR-94 EB Ramps & Market Street	35.0	A	28.2	B	34.9	A	26.6	B	Encanto
	Market Street & Imperial Avenue	20.3	C	19.9	C	20.0	C	17.3	D	Encanto
	Imperial Avenue & Logan Avenue	17.8	D	15.2	D	18.0	C	15.2	D	Encanto
	Logan Avenue & Division Street	19.8	C	24.0	C	18.8	C	22.5	C	Encanto

Source: Chen Ryan Associates; June 2015

As shown in Table 3-5, all segments analyzed are operating at LOS D or better, with the exception of the following seven (7) segments, including three (3) segments in Southeastern San Diego, two (2) segments in Encanto Neighborhoods, and two (2) segments that are in both Southeastern San Diego and Encanto Neighborhoods. They are as follow:

*Southeastern San Diego*

- Eastbound Market Street, between 32<sup>nd</sup> Street and I-15 SB Ramps – LOS E during the AM peak hour and LOS F during the PM peak hour;
- Westbound Market Street, between I-15 NB Ramps and I-15 SB Ramps – LOS E during the PM peak hour; and

- 
- Westbound Imperial Avenue, between 40<sup>th</sup> Street and I-805 SB Ramps – LOS E during the AM peak hour.

#### Encanto Neighborhoods

- Westbound Market Street, between I-805 SB Ramps and I-805 NB Ramps – PM Peak Hour (LOS E); and
- Eastbound Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue – AM and PM Peak Hour (LOS E).

#### Southeastern San Diego & Encanto Neighborhoods

- Eastbound and westbound Imperial Avenue, between I-805 SB Ramps and I-805 NB Ramps – LOS F during both the AM and PM peak hours; and
- Southbound 47<sup>th</sup> Street, between I-805 NB Ramps and I-805 SB Ramps – PM Peak Hour (LOS E).

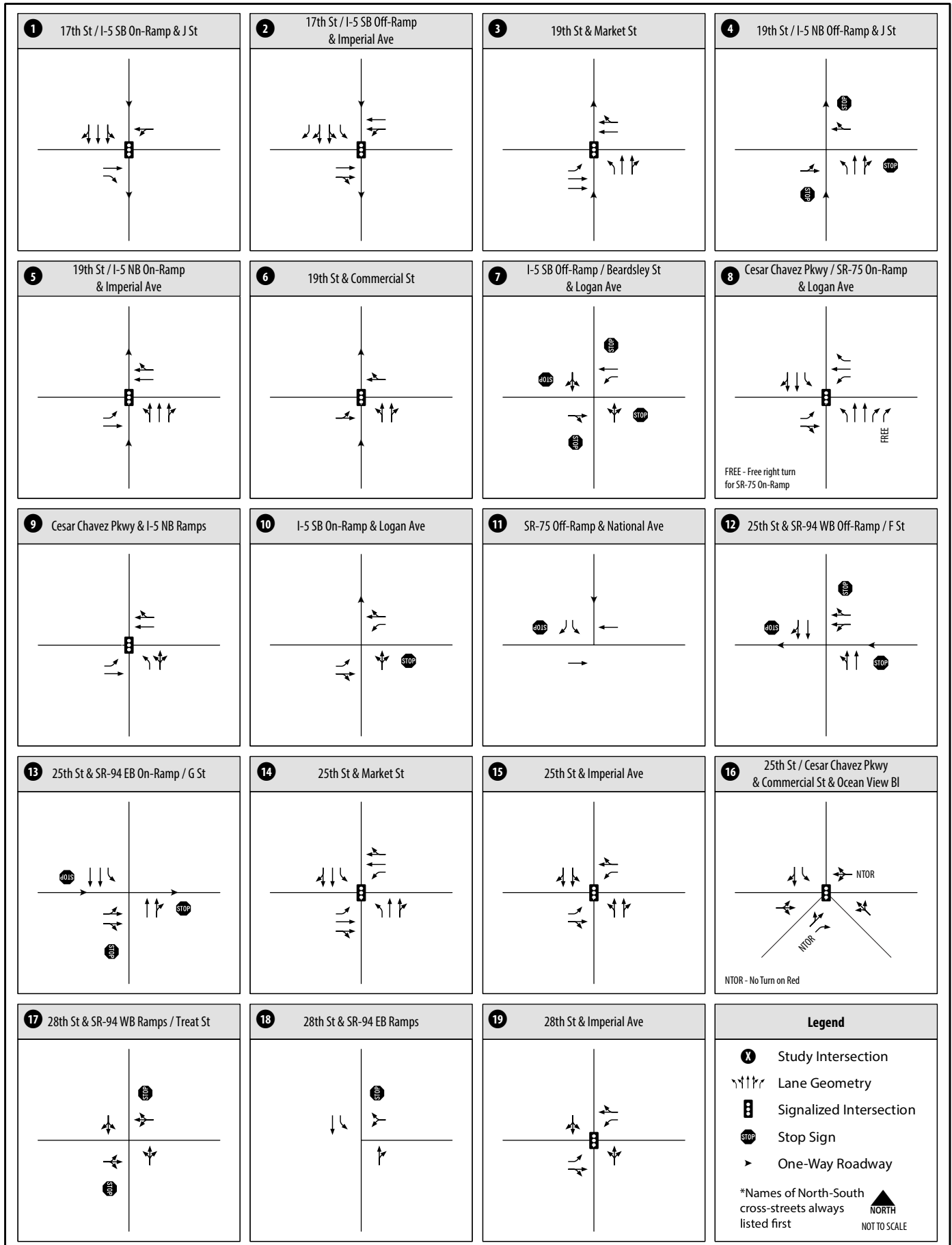
### **3.3 Intersection Analysis**

As described in Chapter 2, a total of eighty-one (81) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-eight (38) intersections located within Southeastern San Diego, twenty-two (22) intersections located within Encanto Neighborhoods, and twenty-one (21) of these intersections are located in adjacent communities.

**Figure 3-4** displays current intersection geometries, while **Figure 3-5** shows existing peak period turning movements for both the AM and PM peak periods. The study area intersection traffic counts are provided in **Appendix E**.

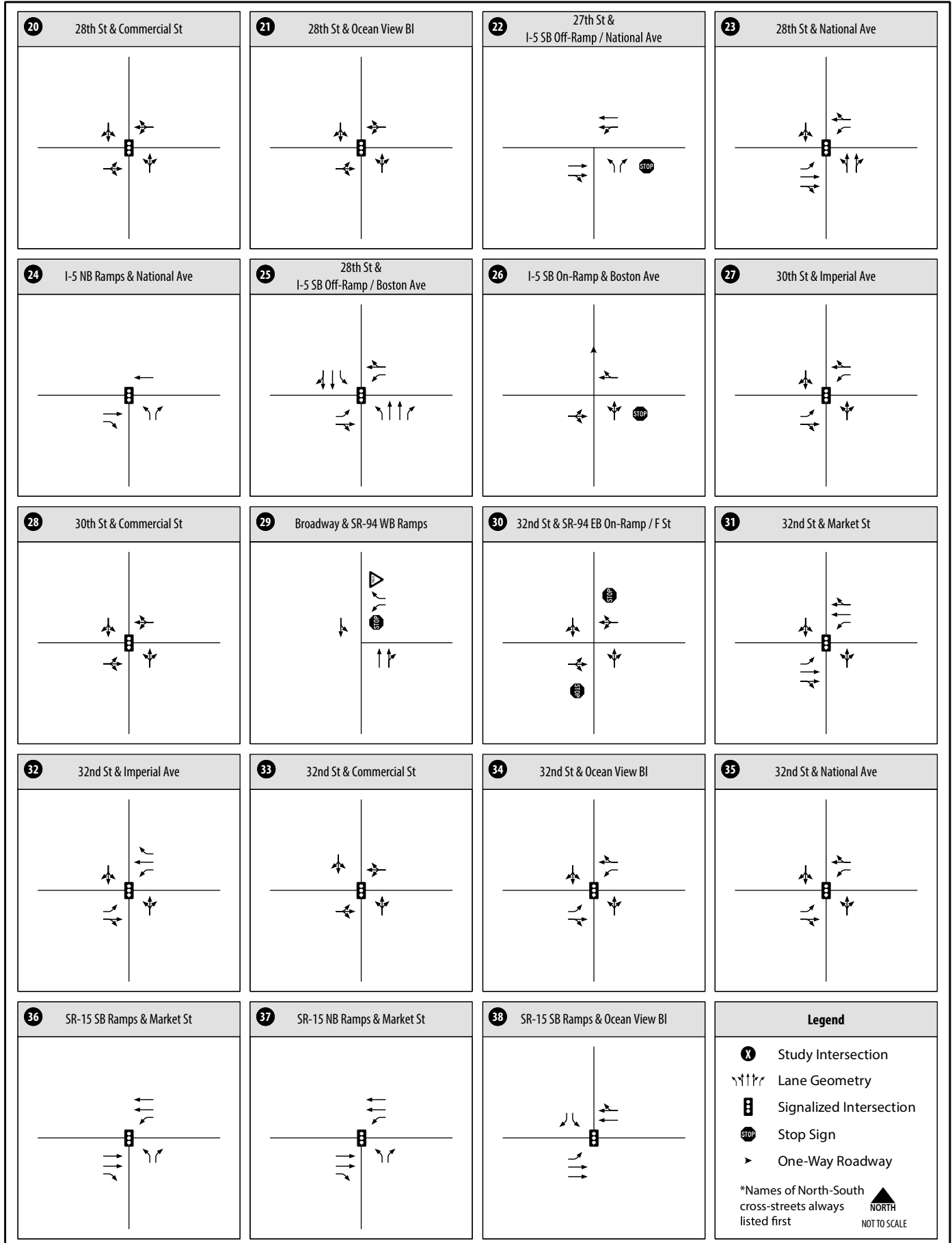
**Table 3-6** displays the LOS analysis results for the key study area intersections located within Southeastern San Diego under Existing Conditions, including traffic control type, date, and source for all existing intersection counts. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in **Appendix F**.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



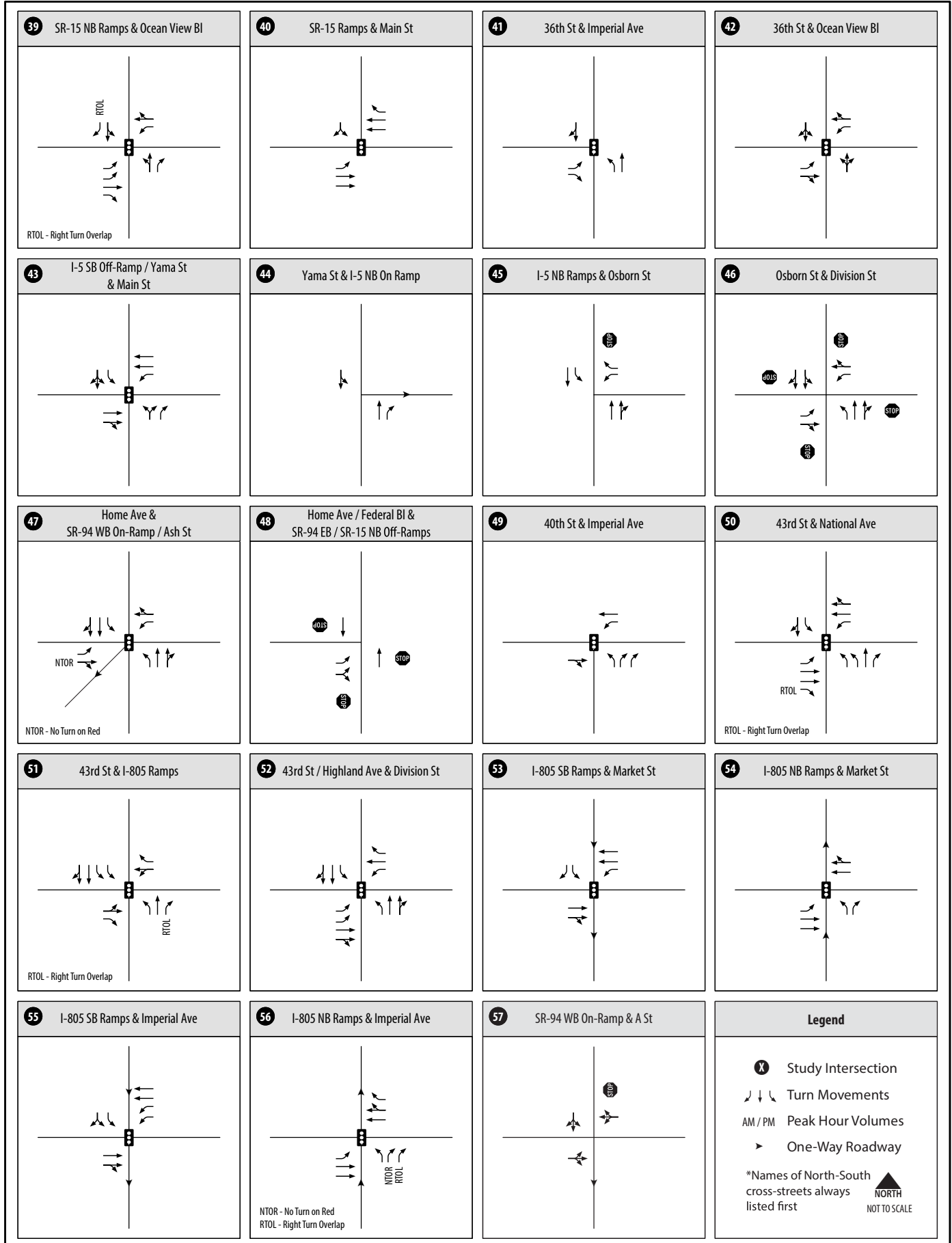
**Figure 3-4: Existing Intersection Geometrics**  
 Intersections 1-19 (Page 1 of 5)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



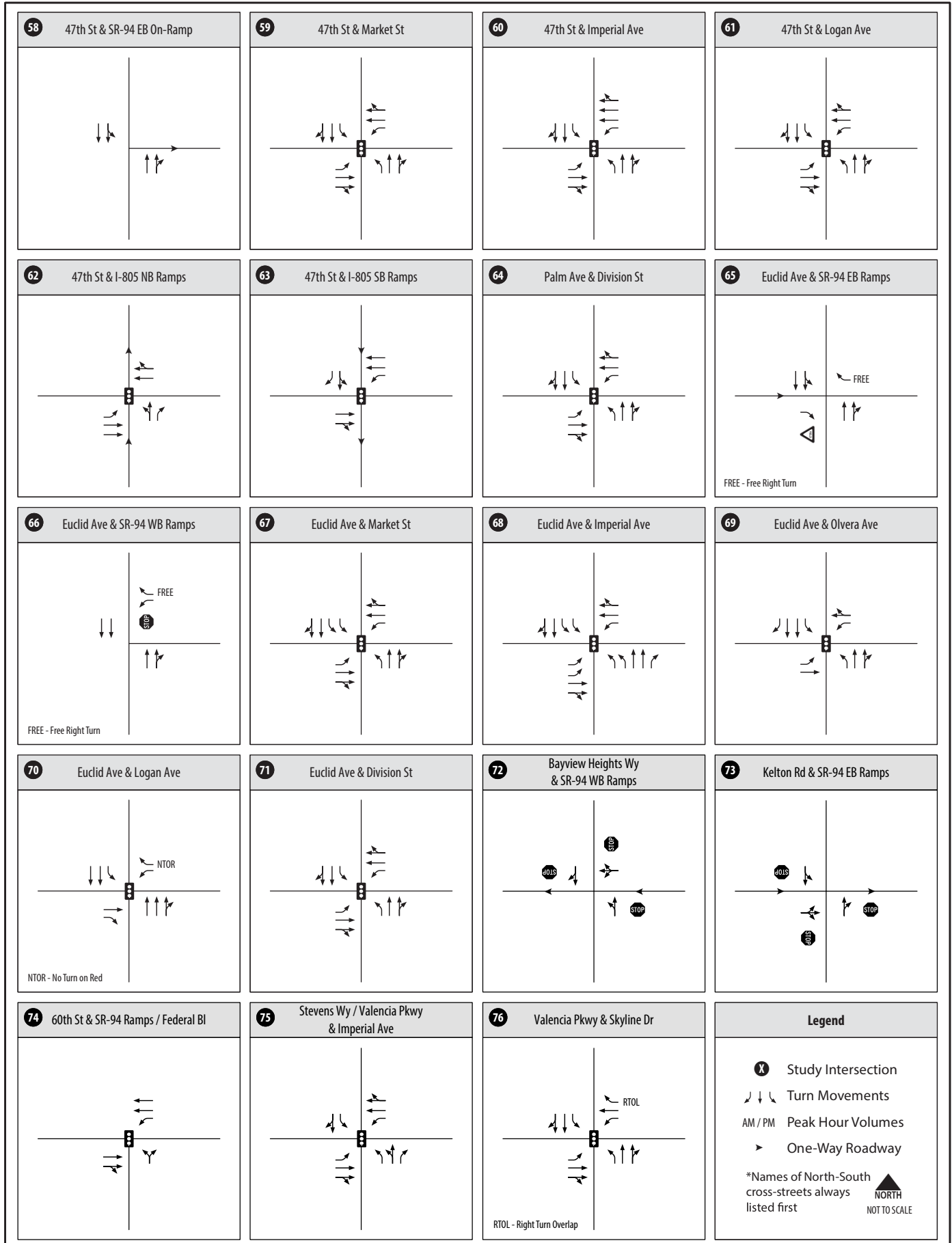
**Figure 3-4: Existing Intersection Geometrics**  
Intersections 20-38 (Page 2 of 5)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



**Figure 3-4: Existing Intersection Geometrics**  
Intersections 39-57 (Page 3 of 5)

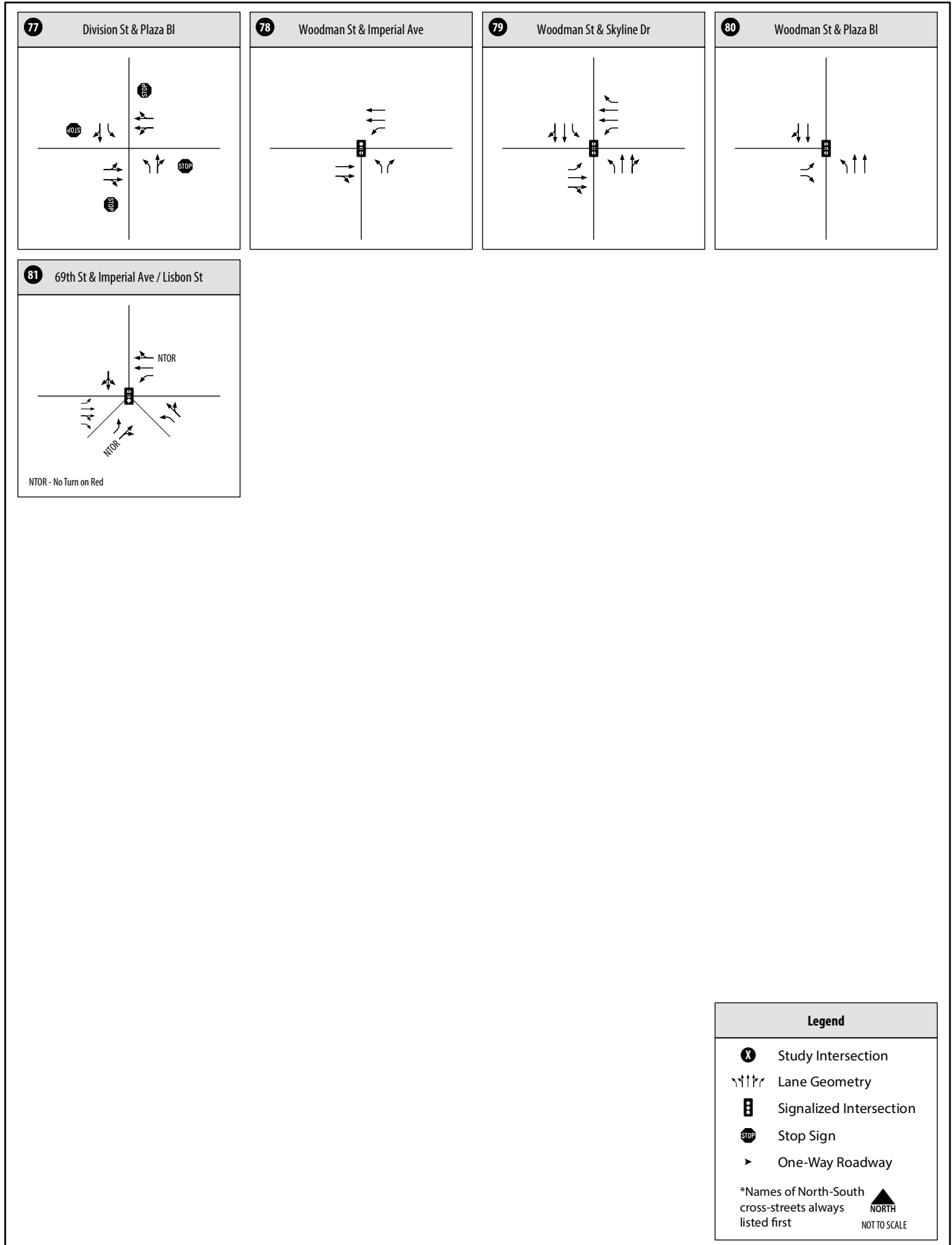
# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



**Figure 3-4: Existing Intersection Geometrics**  
 Intersections 58-76 (Page 4 of 5)

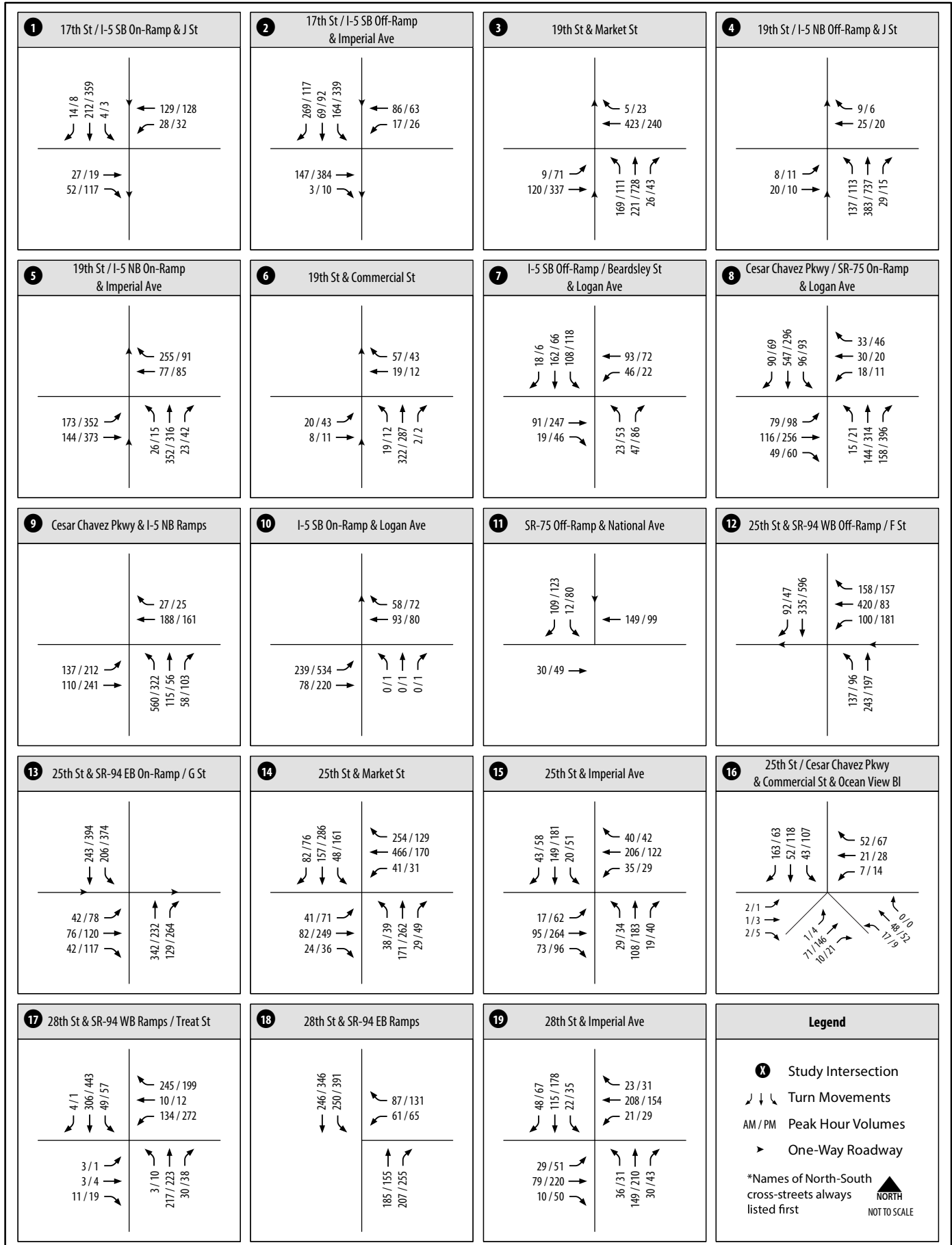


# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



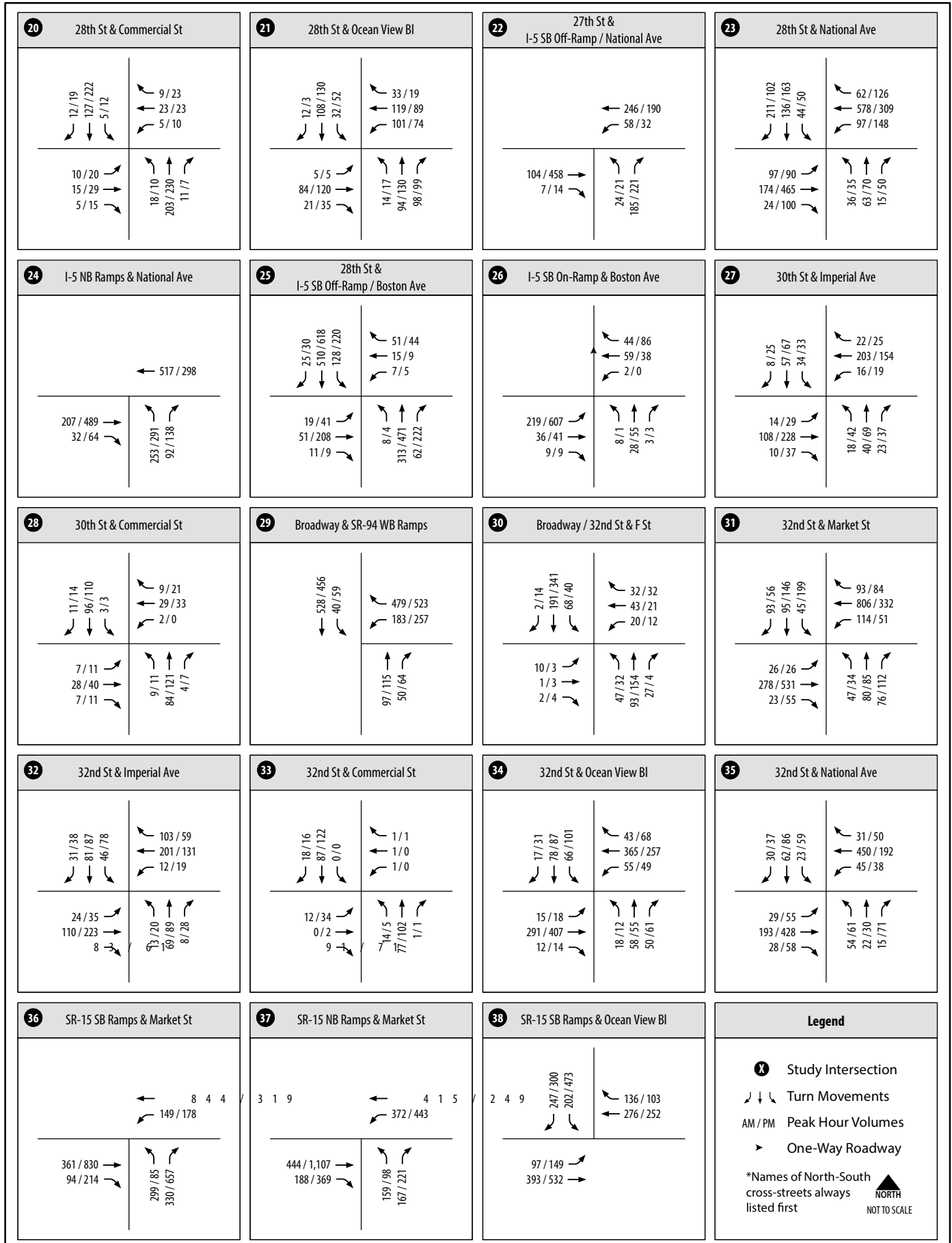
**Figure 3-4: Existing Intersection Geometrics**  
 Intersections 77-81 (Page 5 of 5)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



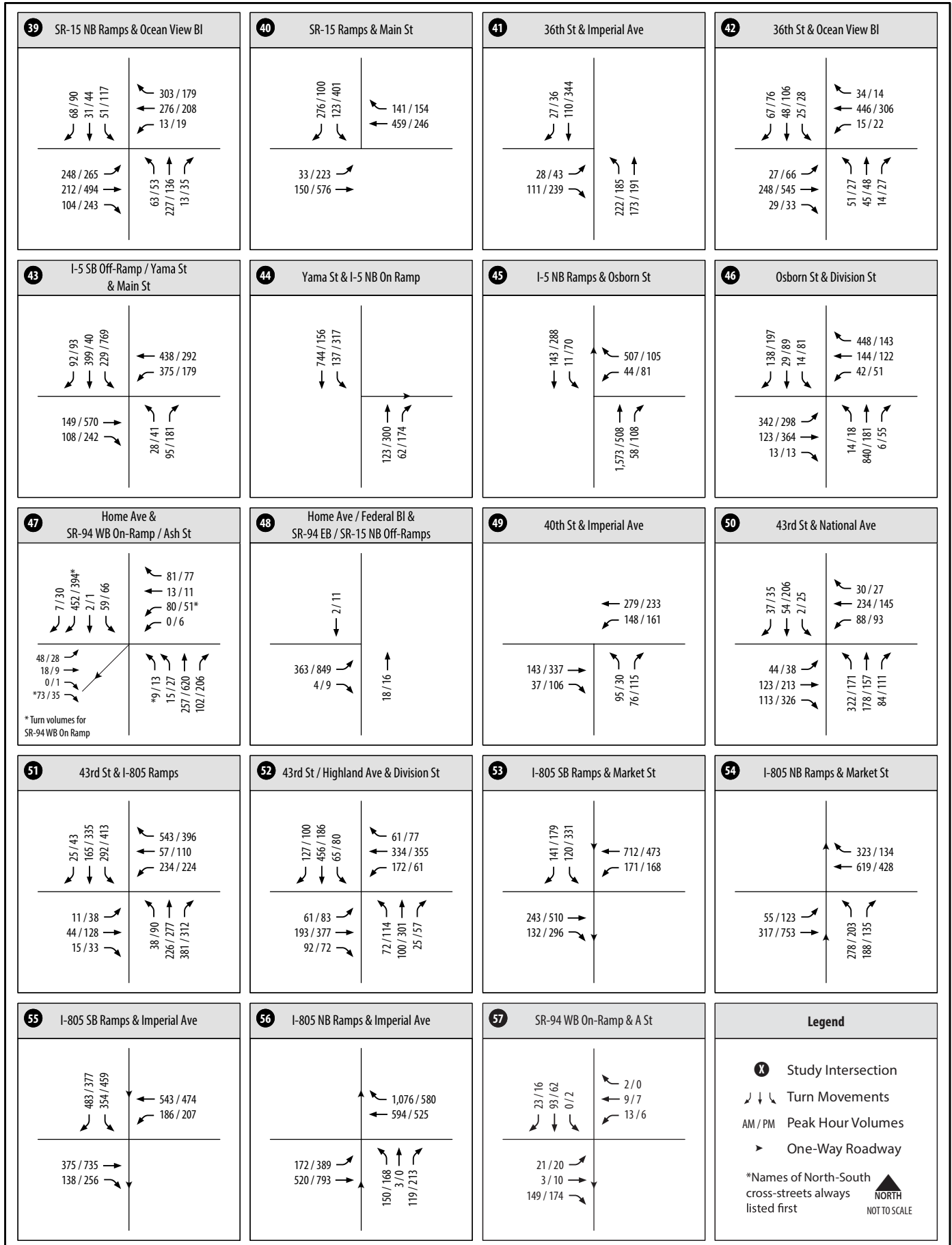
**Figure 3-5: Existing AM/PM Peak Hour Intersection Turning Movements**  
Intersections 1-19 (Page 1 of 5)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



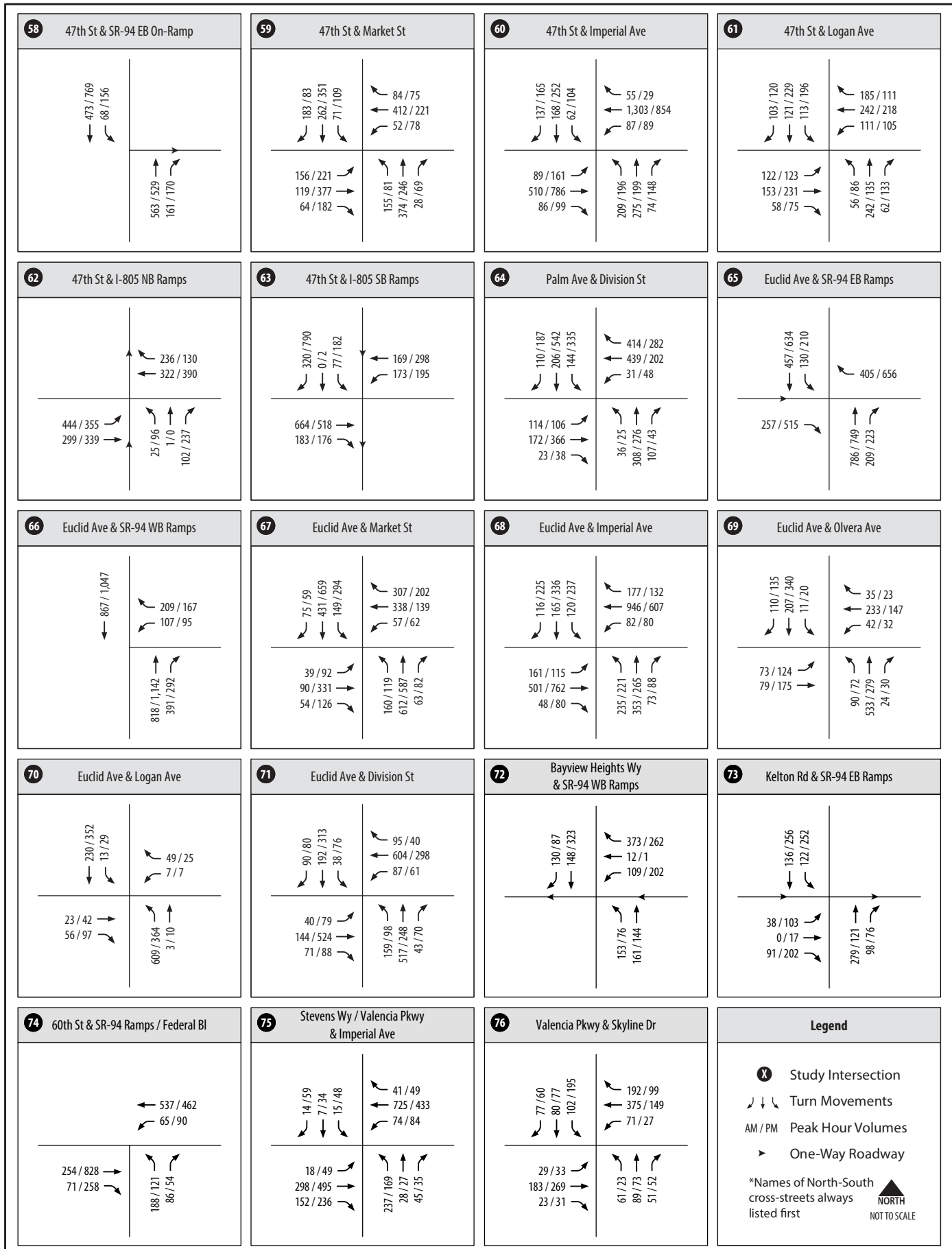
**Figure 3-5: Existing AM/PM Peak hour Intersection Turning Movements**  
Intersections 20-38 (Page 2 of 5)

# SOUTHEASTERN SAN DIEGO COMMUNITY PLAN UPDATE



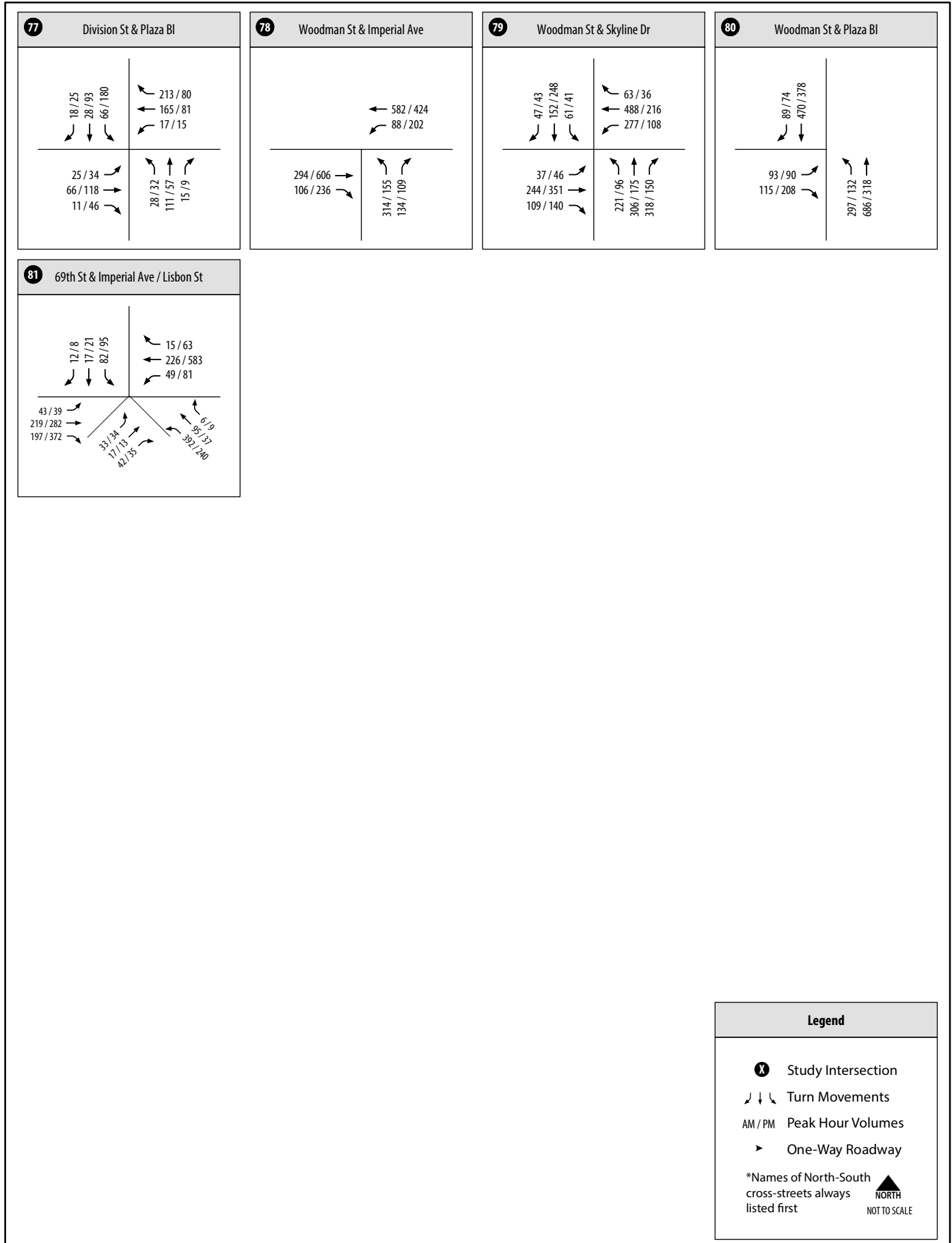
**Figure 3-5: Existing AM/PM Peak Hour Intersection Turning Movements**  
Intersections 39-57 (Page 3 of 3)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



**Figure 3-5: Existing AM / PM Peak Hour Intersection Turning Movements**  
Intersections 58-76 (Page 4 of 5)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



**Figure 3-5: Existing AM / PM Peak Hour Intersection Turning Movements**  
 Intersections 77-81 (Page 5 of 5)

**Table 3-6  
Existing Peak Hour Intersection Level of Service Results**

ID	Intersection	Traffic Control	Count Date	Data Source	AM Peak Hour		PM Peak Hour		Community
					Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
1	17th Street/I-5 SB On-Ramp / J Street	Signalized	10/11/2012	NDS	7.5	A	7.2	A	Downtown
2	17th Street/I-5 SB Off-Ramp / Imperial Avenue	Signalized	10/11/2012	NDS	16.5	B	14.0	B	Downtown
3	19th Street / Market Street	Signalized	10/11/2012	NDS	8.3	A	19.9	B	Southeastern
4	19th Street/I-5 NB Off-Ramp / J Street	AWSC	10/11/2012	NDS	8.4	A	13.4	B	Southeastern
5	19th Street/I-5 NB On-Ramp / Imperial Avenue	Signalized	10/11/2012	NDS	13.1	B	12.2	B	Southeastern
6	19th Street / Commercial Street	Signalized	10/11/2012	NDS	5.0	A	24.3	C	Southeastern
7	I-5 SB Off-Ramp/Beardsley Street / Logan Avenue	AWSC	10/9/2012	NDS	10.3	B	12.9	B	Barrio Logan
8	Cesar Chavez Parkway/SR-75 On-Ramp / Logan Avenue	Signalized	10/11/2012	NDS	20.9	C	32.4	C	Barrio Logan
9	Cesar Chavez Parkway / I-5 NB Ramps	Signalized	10/11/2012	NDS	22.6	C	19.9	B	Southeastern
10	I-5 SB On-Ramp / Logan Avenue	OWSC	10/11/2012	NDS	8.3	A	49.4	E	Barrio Logan
11	SR-75 Off-Ramp / National Avenue	OWSC	10/11/2012	NDS	10.1	B	10.2	B	Barrio Logan
12	25th Street / SR-94 WB Off-Ramp/F Street	AWSC	10/9/2012	NDS	22.4	C	20.7	C	Golden Hill
13	25th Street / SR-94 EB On-Ramp/G Street	AWSC	10/9/2012	NDS	11.0	B	19.3	C	Southeastern
14	25th Street / Market Street	Signalized	10/9/2012	NDS	21.4	C	28.4	C	Southeastern
15	25th Street / Imperial Avenue	Signalized	10/9/2012	NDS	12.7	B	12.8	B	Southeastern
16	25th Street/Cesar Chavez Parkway/Ocean View Boulevard / Commercial Street	Signalized	10/9/2012	NDS	24.4	C	26.1	C	Southeastern



**Table 3-6  
Existing Peak Hour Intersection Level of Service Results**

ID	Intersection	Traffic Control	Count Date	Data Source	AM Peak Hour		PM Peak Hour		Community
					Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
17	28th Street / SR-94 WB Ramps/Treat Street	TWSC	10/9/2012	NDS	16.7	C	423.1	F	Golden Hill
18	28th Street / SR-94 EB Ramps	OWSC	10/9/2012	NDS	38.5	E	123.3	F	Southeastern
19	28th Street / Imperial Avenue	Signalized	5/18/2011	Commercial Imperial Corridor	16.4	B	18.5	B	Southeastern
20	28th Street / Commercial Street	Signalized	5/18/2011	Commercial Imperial Corridor	5.9	A	7.3	A	Southeastern
21	28th Street / Ocean View Boulevard	Signalized	10/9/2012	NDS	14.0	B	13.7	B	Southeastern
22	27th Street/I-5 SB Off-Ramp / National Avenue	OWSC	10/24/2012	Euclid National	12.0	B	16.1	C	Barrio Logan
23	28th Street / National Avenue	Signalized	10/24/2012	Euclid National	34.9	C	19.6	B	Southeastern
24	I-5 NB Ramps / National Avenue	Signalized	10/24/2012	Euclid National	29.1	C	30.7	C	Southeastern
25	28th Street/I-5 SB Off-Ramp / Boston Avenue	Signalized	10/9/2012	NDS	10.1	B	15.7	B	Barrio Logan
26	I-5 SB On-Ramp / Boston Avenue	OWSC	10/9/2012	NDS	18.5	C	192.8	F	Barrio Logan
27	30th Street / Imperial Avenue	Signalized	5/18/2011	Commercial Imperial Corridor	12.1	B	10.0	A	Southeastern
28	30th Street / Commercial Street	Signalized	5/18/2011	Commercial Imperial Corridor	9.6	A	9.4	A	Southeastern
29	Broadway / SR-94 WB Ramps	OWSC	10/11/2012	NDS	43.6	E	78.9	F	Golden Hill
30	Broadway/32nd Street / F Street	TWSC	10/11/2012	NDS	15.7	C	15.6	C	Southeastern
31	32nd Street / Market Street	Signalized	10/11/2012	NDS	11.0	B	15.2	B	Southeastern
32	32nd Street / Imperial Avenue	Signalized	5/18/2011	Commercial Imperial Corridor	15.6	B	16.9	B	Southeastern

**Table 3-6  
Existing Peak Hour Intersection Level of Service Results**

ID	Intersection	Traffic Control	Count Date	Data Source	AM Peak Hour		PM Peak Hour		Community
					Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
33	32nd Street / Commercial Street	Signalized	5/18/2011	Commercial Imperial Corridor	5.8	A	7.8	A	Southeastern
34	32nd Street / Ocean View Boulevard	Signalized	10/9/2012	NDS	17.2	B	17.2	B	Southeastern
35	32nd Street / National Boulevard	Signalized	10/25/2012	Euclid National	6.7	A	7.8	A	Southeastern
36	I-15 SB Ramps / Market Street	Signalized	10/9/2012	NDS	14.2	B	25.1	C	Southeastern
37	I-15 NB Ramps / Market Street	Signalized	10/9/2012	NDS	21.2	C	39.0	D	Southeastern
38	I-15 SB Ramps / Ocean View Boulevard	Signalized	10/9/2012	NDS	11.7	B	16.6	B	Southeastern
39	I-15 NB Ramps / Ocean View Boulevard	Signalized	10/9/2012	NDS	60.2	E	31.7	C	Southeastern
40	I-15 Ramps / Main Street	Signalized	10/9/2012	NDS	21.0	C	36.9	D	Barrio Logan
41	36th Street / Imperial Avenue	Signalized	3/29/2011	City of SD (IC049-11)	13.0	B	13.3	B	Southeastern
42	36th Street / Ocean View Boulevard	Signalized	10/9/2012	NDS	12.7	B	14.6	B	Southeastern
43	I-5 SB Off-Ramp/Yama Street / Main Street	Signalized	10/9/2012	NDS	22.8	C	39.6	D	Barrio Logan
44	Yama Street / I-5 SB On-Ramp	OWSC	10/9/2012	NDS	3.0	A	10.7	B	Barrio Logan
45	I-5 NB Ramps / Osborn Street	OWSC	10/9/2012	NDS	630.9	F	51.1	F	Southeastern
46	Osborn Street / Division Street	AWSC	10/9/2012	NDS	94.0	F	25.6	D	Southeastern /City of National City
47	Home Avenue / SR-94 WB On-Ramp / Ash Street/Federal Boulevard	Signalized	10/9/2012	NDS	21.1	C	20.8	C	Mid-City
48	Home Avenue/Federal Boulevard / SR-94 EB Off-Ramp/I-15 NB Off-Ramp	AWSC	10/9/2012	NDS	9.3	A	23.9	C	Southeastern

**Table 3-6  
Existing Peak Hour Intersection Level of Service Results**

ID	Intersection	Traffic Control	Count Date	Data Source	AM Peak Hour		PM Peak Hour		Community
					Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
49	40th Street / Imperial Avenue	Signalized	10/9/2012	NDS	16.3	B	21.8	C	Southeastern
50	43rd Street / National Avenue	Signalized	10/24/2012	Euclid National	21.4	C	20.3	C	Southeastern
51	43rd Street / I-805 Ramps	Signalized	10/9/2012	NDS	27.0	C	36.1	D	Southeastern
52	43rd Street/Highland Avenue / Division Street	Signalized	10/9/2012	NDS	28.7	C	21.8	C	Southeastern
53	Market Street / I-805 SB Ramps	Signalized	5/24/2011	Euclid+Market	17.2	B	26.1	C	Southeastern
54	Market Street / I-805 NB Ramps	Signalized	5/24/2011	Euclid+Market	14.4	B	10.4	B	Encanto
55	Imperial Avenue / I-805 SB Ramps	Signalized	10/9/2012	NDS	20.4	C	24.0	C	Southeastern
56	Imperial Avenue / I-805 NB Ramps	Signalized	10/9/2012	NDS	12.8	B	16.8	B	Encanto
57	SR-94 WB On-Ramp / A Street	OWSC	10/9/2012	NDS	10.5	B	10.3	B	Mid-City
58	47th Street / SR-94 EB On-Ramp	OWSC	10/9/2012	NDS	3.8	A	5.3	A	Encanto
59	47th Street / Market Street	Signalized	5/24/2011	Euclid+Market	29.1	C	26.5	C	Encanto
60	47th Street / Imperial Avenue	Signalized	5/24/2011	Euclid+Market	34.2	C	38.9	D	Encanto
61	47th Street / Logan Avenue	Signalized	10/9/2012	NDS	25.1	C	26.1	C	Encanto
62	47th Street / I-805 NB Ramps	Signalized	10/9/2012	NDS	12.8	B	8.1	A	Encanto
63	47th Street / I-805 SB Ramps	Signalized	10/9/2012	NDS	14.3	B	26.0	C	Encanto
64	Palm Avenue / Division Street	Signalized	10/9/2012	NDS	33.3	C	28.3	C	City of National City
65	Euclid Avenue / SR-94 EB Ramps	OWSC	5/24/2011	Euclid+Market	46.8	E	177.4	F	Encanto
66	Euclid Avenue / SR-94 WB Ramps	OWYC	5/24/2011	Euclid+Market	88.7	F	295.4	F	Mid-City

**Table 3-6  
Existing Peak Hour Intersection Level of Service Results**

ID	Intersection	Traffic Control	Count Date	Data Source	AM Peak Hour		PM Peak Hour		Community
					Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
67	Euclid Avenue / Market Street	Signalized	5/24/2011	Euclid+Market	27.5	C	30.5	C	Encanto
68	Euclid Avenue / Imperial Avenue	Signalized	5/24/2011	Euclid+Market	36.7	D	36.9	D	Encanto
69	Euclid Avenue / Olvera Avenue	Signalized	10/9/2012	NDS	43.8	D	47.7	D	Encanto
70	Euclid Avenue / Logan Avenue	Signalized	10/9/2012	NDS	14.6	B	20.5	C	Encanto
71	Euclid Avenue / Division Street	Signalized	10/9/2012	NDS	27.7	C	23.1	C	City of National City
72	Bayview Heights Way / SR-94 WB Ramps	AWSC	10/9/2012	NDS	22.3	C	24.2	C	Mid-City
73	Kelton Road / SR-94 EB Ramps	AWSC	10/9/2012	NDS	13.9	B	24.8	C	Encanto
74	60th Street / SR-94 Ramps/Federal Boulevard	Signalized	10/9/2012	NDS	10.7	B	11.3	B	Encanto
75	Valencia Parkway / Imperial Avenue	Signalized	10/10/2012	NDS	26.0	C	29.9	C	Encanto
76	Valencia Parkway / Skyline Drive	Signalized	10/10/2012	NDS	23.2	C	25.1	C	Encanto
77	Division Street / Plaza Boulevard	AWSC	10/10/2012	NDS	12.2	B	9.6	A	Encanto / Skyline
78	Woodman Street / Imperial Avenue	Signalized	10/10/2012	NDS	14.0	B	16.9	B	Encanto / Skyline
79	Woodman Street / Skyline Drive	Signalized	10/10/2012	NDS	44.6	D	23.1	C	Encanto / Skyline
80	Woodman Street / Plaza Boulevard	Signalized	10/10/2012	NDS	18.3	B	12.4	B	Encanto / Skyline
81	69th Street / Imperial Avenue/Lisbon Street	Signalized	10/10/2012	NDS	44.5	D	39.7	D	Encanto / Skyline

Source: NDS, City of San Diego, Chen Ryan Associates; June 2015

**Notes:**

Bold letter indicates unacceptable LOS E or F.

OWSC = One-way stop controlled.

TWSC = Two-way stop controlled.

AWSC = All-way stop controlled.

For one- or two-way stop controlled intersections, the delay shown is the worst delay experienced by any of the approaches.

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As shown in Table 3-6, ten (10) study area intersections are currently operating at LOS E or F during the AM and/PM peak hour, including four (4) intersections located within Southeastern San Diego, two (2) within Encanto Neighborhoods, and four (4) within the sphere of influence area. They are as follows:

Southeastern San Diego

18. 28th Street / SR-94 EB Ramps – (AM: LOS E / PM: LOS F);
26. I-15 NB Ramps / Ocean View Boulevard – (AM: LOS E);
45. I-5 NB Ramps / Osborn Street – (AM: LOS F / PM: LOS F); and
46. Osborn Street / Division Street – (AM: LOS F).

Encanto Neighborhoods

65. Euclid Avenue / SR-94 EB Ramps – (AM: LOS E / PM: LOS F); and
66. Euclid Avenue / SR-94 WB Ramps – (AM: LOS F / PM: LOS F).

Sphere of Influence

10. I-5 SB On-Ramp / Logan Avenue – (PM: LOS E);
17. 28th Street / SR-94 WB Ramps/Treat Street – (PM: LOS F);
26. I-5 SB On-Ramp / Boston Avenue – (PM: LOS F); and
29. Broadway / SR-94 WB Ramps – (AM: LOS E / PM: LOS F).

### **3.4 Freeway/State Highway Segment Analysis**

Four regional corridors run adjacent to or traverse the Southeastern San Diego and Encanto Neighborhoods communities, carrying significant levels of traffic while providing regional access to and from the communities.

Interstate 5

Interstate 5 (I-5) is a major north-south regional facility providing access between the International Border with Mexico, cities north of San Diego, and Orange and Los Angeles counties to the north. I-5 has eight mixed-flow/general purpose lanes (four in each direction), and one or two auxiliary lanes. Local access is provided via interchanges at 17<sup>th</sup> Street, Imperial Avenue, 28<sup>th</sup> Street, and Main Street.

The California Department of Transportation (Caltrans) maintains and operates I-5. In 2011, I-5 accommodated 155,000 to 208,000 average daily trips along the segments adjacent to Southeastern San Diego. Trucks comprise approximately four to five percent of the total traffic on I-5.

Interstate 15

Interstate 15 (I-15) is a major north-south regional facility providing access between the I-5 near Southeastern San Diego and locations north of San Diego, including Riverside County and beyond. I-15 has four to eight mixed-flow/general purpose lanes, and one auxiliary lane. Local access is provided via interchanges at Market Street and Ocean View Boulevard. Caltrans maintains and operates I-15. In 2011, I-15 accommodated between 48,000 and 115,000 average daily trips

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along the segments adjacent to Southeastern San Diego. Trucks comprise approximately five percent of the total traffic on I-15.

#### Interstate 805

Interstate 805 (I-805) is a major north-south regional facility providing access between the International Border with Mexico and Sorrento Valley. I-805 has eight mixed-flow/general purpose lanes, and one or two auxiliary lanes. Local access is provided via interchanges at Market Street, Imperial Avenue and 43<sup>rd</sup> Street. Caltrans maintains and operates I-805. In 2011, I-805 accommodated between 196,000 and 225,000 average daily trips along the segments adjacent to the Southeastern San Diego and Encanto Neighborhoods communities. Trucks comprise approximately five to six percent of the total traffic on I-805.

#### State Route 94

State Route 94 (SR-94) is a major east-west regional facility providing access between downtown San Diego and the unincorporated community of Boulevard. SR-94 has eight mixed-flow/general purpose lanes, and one or two auxiliary lanes. Local access is provided via interchanges at 25<sup>th</sup> Street, 28<sup>th</sup> Street, Broadway, Home Avenue, 47<sup>th</sup> Street, Euclid Avenue, Bayview Heights Drive, and Federal Boulevard. Caltrans maintains and operates SR-94. In 2011, SR-94 accommodated between 124,000 and 172,000 average daily trips along the segments adjacent to the Southeastern San Diego and Encanto Neighborhoods communities. Trucks comprise approximately three to four percent of the total traffic on SR-94.

**Table 3-7** displays freeway segment LOS analysis results for the key freeway segments in the vicinity of the Southeastern San Diego and Encanto Neighborhoods communities. Year 2011 freeway traffic volumes were obtained from Caltrans and are included in **Appendix G**. As shown in the table, there are currently nine (9) freeway segments within the project study area operating at LOS E or F, including:

- I-5, between 17<sup>th</sup> Street and SR-94 – (SB: LOS E);
- I-5, between SR-94 and Imperial Avenue – (NB: LOS F);
- I-5, between 28<sup>th</sup> Street & I-15 – (NB: LOS F);
- I-5, between I-15 and Main Street (northbound and southbound) – LOS E;
- I-805, between Home Avenue and SR-94 – (NB: LOS F / SB LOS F);
- I-805, between SR-94 and Market Street – (NB: LOS F / SB: LOS F);
- I-805, between Imperial Avenue and 43<sup>rd</sup> Street – (SB: LOS E);
- SR-94, between I-805 and 47<sup>th</sup> Street – (WB: LOS E); and
- SR-94, between 47<sup>th</sup> Street and Euclid Avenue – (WB: LOS E).

**Table 3-7  
Existing Freeway Segment Level of Service Results**

Freeway	Segment	ADT <sup>1</sup>	Direction	# of Lanes	Capacity <sup>2</sup>	D <sup>3</sup>	K <sup>4</sup>	HV <sup>5</sup>	Peak Hour Volume	V/C	LOS
I-5	17th Street & SR-94	201,000	NB	4M+2A	12,220	54.3%	8.4%	4.0%	9,600	0.79	C
			SB	4M	9,400	53.2%	8.3%	4.0%	9,400	1.00	E
I-5	SR-94 & Imperial Avenue	208,000	NB	4M+1A	10,810	62.2%	8.1%	4.0%	11,100	1.03	F0
			SB	4M+1A	10,810	53.2%	8.3%	4.0%	9,700	0.90	D
I-5	Imperial Avenue & SR-75	161,000	NB	4M+1A	10,810	62.2%	8.1%	3.8%	8,600	0.80	D
			SB	4M+1A	10,810	57.7%	8.2%	3.8%	8,000	0.74	C
I-5	SR-75 & 28th Street	159,000	NB	4M+2A	12,220	70.4%	8.4%	5.0%	9,900	0.81	D
			SB	4M+1A	10,810	57.7%	8.2%	5.0%	7,900	0.73	C
I-5	28th Street & I-15	155,000	NB	4M	9,400	70.4%	8.4%	5.0%	9,600	1.02	F0
			SB	4M	9,400	57.7%	8.2%	5.0%	7,700	0.82	D
I-5	I-15 & Main Street	191,000	NB	4M+2A	12,220	70.4%	8.4%	5.0%	11,900	0.97	E
			SB	5M	11,750	65.4%	8.7%	5.0%	11,400	0.97	E
I-15	I-805 & SR-94	109,000	NB	3M+1A	8,460	60.3%	8.0%	5.1%	5,500	0.65	C
			SB	2M+1A	6,110	51.0%	8.4%	5.1%	4,900	0.80	D
I-15	SR-94 & Market Street	115,000	NB	3M+1A	8,460	59.5%	8.1%	5.1%	5,800	0.69	C
			SB	3M+1A	8,460	55.2%	9.7%	5.1%	6,500	0.77	C
I-15	Market Street & Ocean View Boulevard	107,000	NB	3M	7,050	61.2%	8.1%	5.1%	5,600	0.79	C
			SB	3M	7,050	55.2%	9.6%	5.1%	6,000	0.85	D
I-15	Ocean View Boulevard & I-5	48,000	NB	3M+1A	8,460	61.2%	7.0%	5.1%	2,200	0.26	A
			SB	4M+1A	10,810	55.2%	7.8%	5.1%	2,200	0.20	A
I-15	I-5 & Norman Scott Road	16,500	NB	2M	4,700	61.2%	7.0%	5.1%	700	0.15	A
			SB	2M	4,700	54.4%	7.5%	5.1%	700	0.15	A



**Table 3-7  
Existing Freeway Segment Level of Service Results**

Freeway	Segment	ADT <sup>1</sup>	Direction	# of Lanes	Capacity <sup>2</sup>	D <sup>3</sup>	K <sup>4</sup>	HV <sup>5</sup>	Peak Hour Volume	V/C	LOS
I-805	Home Avenue & SR-94	217,000	NB	4M	9,400	64.9%	7.0%	6.5%	10,400	1.11	F0
			SB	4M	9,400	58.6%	7.8%	6.5%	10,400	1.11	F0
I-805	SR-94 & Market Street	216,000	NB	4M	9,400	64.7%	7.0%	6.5%	10,200	1.09	F0
			SB	4M	9,400	58.6%	7.8%	6.5%	10,400	1.11	F0
I-805	Market Street & Imperial Avenue	227,000	NB	4M+2A	12,220	64.7%	7.0%	6.5%	10,800	0.88	D
			SB	4M+2A	12,220	58.6%	7.8%	6.5%	10,900	0.89	D
I-805	Imperial Avenue & 43rd Street	210,000	NB	5M	11,750	64.7%	7.0%	6.5%	9,900	0.84	D
			SB	4M+1A	10,810	60.7%	7.5%	6.5%	10,100	0.93	E
I-805	43rd Street & Plaza Boulevard	196,000	NB	4M+2A	12,220	72.0%	6.0%	6.5%	8,900	0.73	C
			SB	5M	11,750	59.5%	7.5%	6.5%	9,300	0.79	C
SR-94	17th Street & 25th Street	110,000	EB	4M	9,400	69.8%	9.3%	3.6%	7,500	0.80	D
			WB	3M+1A	8,460	78.0%	7.6%	3.6%	6,900	0.82	D
SR-94	25th Street & 28th Street	124,000	EB	4M	9,400	68.3%	9.3%	3.6%	8,300	0.88	D
			WB	4M	9,400	74.4%	7.6%	3.6%	7,400	0.79	C
SR-94	28th Street & 30th Street	132,000	EB	4M	9,400	67.7%	8.6%	3.6%	8,100	0.86	D
			WB	4M	9,400	74.4%	7.6%	3.6%	7,900	0.84	D
SR-94	30th Street & I-15	146,000	EB	4M+1A	10,810	67.7%	8.6%	3.6%	9,000	0.83	D
			WB	4M+1A	10,810	74.4%	7.6%	3.6%	8,700	0.80	D
SR-94	I-15 & Home Avenue	140,000	EB	4M+1A	10,810	67.7%	8.6%	4.2%	8,600	0.80	D
			WB	4M	9,400	74.4%	7.6%	4.2%	8,300	0.88	D
SR-94	Home Avenue & I-805	128,000	EB	4M+1A	10,810	67.7%	8.6%	4.2%	7,900	0.73	C
			WB	4M	9,400	74.4%	7.6%	4.2%	7,600	0.81	D

**Table 3-7  
Existing Freeway Segment Level of Service Results**

Freeway	Segment	ADT <sup>1</sup>	Direction	# of Lanes	Capacity <sup>2</sup>	D <sup>3</sup>	K <sup>4</sup>	HV <sup>5</sup>	Peak Hour Volume	V/C	LOS
SR-94	I-805 & 47th Street	172,000	EB	5M	11,750	67.7%	8.6%	3.9%	10,600	0.90	D
			WB	4M+1A	10,810	74.4%	7.6%	3.9%	10,200	0.94	E
SR-94	47th Street & Euclid Avenue	171,000	EB	5M+1A	13,160	67.7%	8.6%	3.9%	10,500	0.80	D
			WB	4M+1A	10,810	74.4%	7.6%	3.9%	10,200	0.94	E
SR-94	Euclid Avenue & Kelton Road	156,000	EB	5M	11,750	67.7%	8.6%	3.9%	9,600	0.82	D
			WB	4M+1A	10,810	70.0%	7.3%	3.9%	8,400	0.78	C
SR-94	Kelton Road & Federal Boulevard	161,000	EB	4M+1A	10,810	64.1%	8.6%	3.9%	9,300	0.86	D
			WB	4M+1A	10,810	70.0%	7.3%	3.9%	8,700	0.80	D
SR-94	Federal Boulevard & College Grove Way	145,000	EB	4M	9,400	64.1%	8.6%	3.9%	8,400	0.89	D
			WB	4M	9,400	70.0%	7.3%	3.9%	7,800	0.83	D
SR-94	College Grove Way & College Avenue	145,000	EB	4M	9,400	64.1%	8.6%	3.9%	8,400	0.89	D
			WB	4M	9,400	70.4%	7.8%	3.9%	8,400	0.89	D

Source: Caltrans, Chen Ryan Associates; June 2015

Notes:

Bold letter indicates unacceptable LOS E or F.

M = Mainline. Aux = Auxiliary Lane.

<sup>1</sup>Traffic volumes provided by Caltrans (2011).

<sup>2</sup>The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.

<sup>3</sup>D = Directional split.

<sup>4</sup>K = Peak hour %.

<sup>5</sup>HV = Heavy vehicle %.

### 3.5 Freeway Ramp Metering Analysis

**Table 3-8** displays the ramp metering analysis conducted at the SR-94 EB On-Ramps at 25<sup>th</sup> Street, 28<sup>th</sup> Street, 32<sup>nd</sup> Street; Euclid Avenue, Kelton Road, and Federal Boulevard / Home Avenue; and at the I-805 NB On-Ramps at 47<sup>th</sup> Street and Imperial Avenue under Existing Conditions. Ramp meter rates were obtained from Caltrans District 11 and included in **Appendix H**.

Table 3-8  
Existing Ramp Metering Analysis

On-Ramp	# of Lanes		Peak Hour	Demand <sup>1</sup> (veh/hr) per lane	Meter Rate <sup>2</sup> (veh/hr) per lane	Excess Demand <sup>3</sup> (veh/hr) per lane	Delay <sup>4</sup> (min)	Queue <sup>5</sup> (ft)
	SOV	HOV						
SR-94 EB On-Ramp @ 25th Street	2	0	PM	738	868	0	0	0
SR-94 EB On-Ramp @ 28th Street	1	0	PM	646	868	0	0	0
SR-94 EB On-Ramp @ 32nd Street	1	0	PM	405	423	0	0	0
SR-94 WB On-Ramp @ Euclid Avenue	2	0	AM	454	1,522	0	0	0
SR-94 WB On-Ramp @ Kelton Road	1	1	AM	295	888	0	0	0
SR-94 WB On-Ramp @ Federal Boulevard / Home Avenue	1	0	AM	614	805	0	0	0
I-805 NB On-Ramp @ 47th Street	2	0	AM	401	880	0	0	0
I-805 NB On-Ramp @ Imperial Avenue	2	0	AM	1,251	1,589	0	0	0

Source: Caltrans, Chen Ryan Associates; June 2015

Notes:

SOV = Single Occupancy Vehicle; HOV = High Occupancy Vehicle.

<sup>1</sup> Demand is the peak hour demand expected to use the on-ramp.

<sup>2</sup> Meter Rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans.

<sup>3</sup> Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.

<sup>4</sup> Delay = (Excess Demand / Meter Rate) X 60 min/hr.

<sup>5</sup> Queue = (Excess Demand) X 29 ft/veh.

As shown in the table, the peak hour capacity expected to be processed through the ramp meters is greater than the peak hour demand at both the SR-94 WB On-Ramps and the I-805 NB On-Ramps within the study area. Therefore, freeway on-ramp queuing issues do not currently exist during the AM or PM peak periods at any of the five metered ramps under Existing Conditions.

## 4.0 Preferred Plan

This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters, were evaluated.

Trip generation, VMT, roadway segment analysis, intersection peak hour analysis, freeway segment and ramp metering analyses for the Preferred Plan and Existing Conditions are presented in this section. The Preferred Plan traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035 model. The modeling methodology and assumptions are shown in Chapter 4 of the Southeastern San Diego Community Plan Update Final Technical Report and the Encanto Neighborhoods Community Plan Update Final Technical Report. Final SANDAG Series 12 Future Year Forecast Model Results, including manual adjustments, are provided in **Appendix I**.

### 4.1 Trip Generation

Trip generation analyses were conducted to compare the Preferred Plan and Existing Conditions. Trip generation rates for various land use categories were obtained from the *City of San Diego Trip Generation Manual* (May 2003).

**Table 4-1** and **Table 4-2** compare both the land use quantity and ADT by land use categories under the Preferred Plan and Existing Conditions, for the Southeastern San Diego and Encanto Neighborhoods communities respectively.

Table 4-1  
Land Use Comparison – Southeastern San Diego  
Preferred Plan vs. Existing Conditions

Land Use	Preferred Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Arterial Commercial	1,472.6 ksf	58,899	849.0 ksf	33,952	623.6 ksf	24,947
Automobile Dealership	0.1 Acres	36	0.1 Acres	36	0.0 Acres	0
Automobile Parts Sale	5.7 ksf	356	5.7 ksf	356	0.0 ksf	0
Automobile Repair Shop	42.7 ksf	855	42.7 ksf	855	0.0 ksf	0
Automobile Tire Store	7.6 ksf	190	9.2 ksf	231	-1.6 ksf	-41
Cemetery	123.4 Acres	617	123.4 Acres	617	0.0 Acres	0
Clinic (Medical Office)	188.5 ksf	9,424	188.5 ksf	9,424	0.0 ksf	0
Communications and Utilities	19.1 Acres	0	21.9 Acres	0	-2.9 Acres	0
Community Shopping Center (100,000 SF or more)	799.9 ksf	55,994	698.2 ksf	48,871	101.8 ksf	7,123
Convenience Market Chain (Open Up to 16 Hours Per Day)	40.3 ksf	20,150	40.3 ksf	20,150	0.0 ksf	0

Table 4-1  
Land Use Comparison – Southeastern San Diego  
Preferred Plan vs. Existing Conditions

Land Use	Preferred Plan		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Day Care Center	109 child	545	0 child	0	109 child	545
Elementary School	6,454 Students	12,264	6,454 Students	12,264	0 Students	0
Fire/Police Station	27.7 ksf	830	27.7 ksf	830	0.0 ksf	0
Government Office/Civic Center	52.4 ksf	1,573	52.4 ksf	1,573	0.0 ksf	0
Hotel (Low-Rise) (Motel)	91 Rooms	819	91 Rooms	819	0 Rooms	0
Industrial Park	113.5 ksf	1,703	0.0 ksf	0	113.5 ksf	1,703
Junior High School or Middle School	1,454 Students	2,036	1,454 Students	2,036	0 Students	0
Landscape Open Space (Undeveloped Park)	3.0 Acres	0	3.0 Acres	0	0.0 Acres	0
Library	23.3 ksf	1,166	23.3 ksf	1,166	0.0 ksf	0
Light Industry - General	2,147.1 ksf	32,208	1,808.2 ksf	27,125	338.9 ksf	5,083
MF Residential less or equal 20 DU/acre	4,323 DU	34,584	3,963 DU	31,704	360 DU	2,880
MF Residential over 20 DU/acre	7,948 DU	47,688	5,434 DU	32,604	2,514 DU	15,084
Neighborhood Shopping Center (30,000 SF or more)	30.9 ksf	3,709	48.1 ksf	5,772	-17.2 ksf	-2,063
Office (Low-Rise - 1 ksf to 5 ksf)	17.5 ksf	718	18.7 ksf	767	-1.2 ksf	-49
Office (Low-Rise - 5 ksf to 10 ksf)	24.3 ksf	825	20.9 ksf	710	3.4 ksf	115
Office (Low-Rise - 10 ksf to 15 ksf)	37.8 ksf	1,058	26.2 ksf	733	11.6 ksf	325
Office (Low-Rise - 20 ksf to 25 ksf)	21.0 ksf	525	0.0 ksf	0	21.0 ksf	525
Office (Low-Rise - 50 ksf to 55 ksf)	51.7 ksf	1,034	97.8 ksf	1,957	-46.1 ksf	-923
Office (Low-Rise - 125138 ksf)	125.1 ksf	2,002	0.0 ksf	0	125.1 ksf	2,002
Open Space Park or Preserve	35.2 Acres	177	36.2 Acres	182	-0.9 Acres	-5
Other Health Care	29.8 ksf	1,488	29.8 ksf	1,488	0.0 ksf	0
Other Public Services	23.0 ksf	230	28.5 ksf	285	-5.5 ksf	-55
Other Recreation - High (Developed Park)	6.0 Acres	299	6.0 Acres	299	0.0 Acres	0
Other Retail Trade and Strip Commercial	12.6 ksf	505	13.8 ksf	553	-1.2 ksf	-48
Other School	36.1 ksf	650	36.1 ksf	650	0.0 ksf	0
Other Transportation	0.0 Acres	0	1.3 Acres	8	-1.3 Acres	-8

**Table 4-1  
Land Use Comparison – Southeastern San Diego  
Preferred Plan vs. Existing Conditions**

Land Use	Preferred Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Other University or College (Community College)	7,667 Students	12,267	7,667 Students	12,267	0 Students	0
Park - Active	87.4 Acres	4,369	72.2 Acres	3,609	15.2 Acres	760
Parking Lot - Surface	3.5 Acres	0	3.6 Acres	0	-0.2 Acres	0
Post Office	5.8 ksf	1,170	5.8 ksf	1,170	0.0 ksf	0
Public/Community Meeting Room Facility (Other Public Services)	9.9 ksf	297	9.9 ksf	297	0.0 ksf	0
Religious Facility (without day care)	636.4 ksf	3,179	628.0 ksf	3,137	8.4 ksf	42
Restaurant (High Turnover sit-down)	12.5 ksf	1,620	12.5 ksf	1,620	0.0 ksf	0
Road Right of Way	709.5 Acres	0	711.6 Acres	0	-2.1 Acres	0
Scrap Yards/Auto Dismantling/Landfill	0.0 Acres	0	6.5 Acres	39	-6.5 Acres	-39
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	8 station	1,240	8 station	1,240	0 station	0
Service Station (with food mart)	12 station	1,800	12 station	1,800	0 station	0
Single Family Detached	4,455 DU	40,095	4,360 DU	39,240	95 DU	855
Single Family Multiple-Units	1,310 DU	11,790	1,271 DU	11,439	39 DU	351
Vacant and Undeveloped Land	10.2 Acres	0	64.7 Acres	0	-54.5 Acres	0
Warehousing	76.3 ksf	383	103.2 ksf	517	-26.8 ksf	-134
Wholesale Trade	15.7 ksf	1,099	20.1 ksf	1,405	-4.4 ksf	-306
<b>TOTAL</b>	-	<b>375,546</b>	-	<b>316,877</b>	-	<b>58,669</b>

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 4-1, the Southeastern San Diego Preferred Plan would generate 58,669 more daily trips when compared to the Existing Conditions, an 18.5% increase.

Table 4-2  
Land Use Comparison – Encanto Neighborhoods  
Preferred Plan vs. Existing Conditions

Land Use	Preferred Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Alternative Correctional Facility	0 Cells	0	300 Cells	600	-300 Cells	-600
Arterial Commercial	826.1 ksf	33,044	236.5 ksf	9,459	589.6 ksf	23,585
Automobile Dealership	0.1 Acres	28	0.1 Acres	28	0.0 Acres	0
Automobile Repair Shop	8.8 ksf	177	8.8 ksf	177	0.0 ksf	0
Carwash (Self service)	0 stall	0	4 stall	400	-4 stall	-400
Cemetery	40.5 Acres	202	44.7 Acres	224	-4.3 Acres	-22
Clinic (Medical Office)	27.6 ksf	1,382	0.0 ksf	0	27.6 ksf	1,382
Commercial Recreation	0.0 ksf	0	9.0 ksf	269	-9.0 ksf	-269
Communications and Utilities	37.3 Acres	0	40.4 Acres	0	-3.1 Acres	0
Community Shopping Center (100,000 SF or more)	291.3 ksf	20,389	81.0 ksf	5,673	210.2 ksf	14,716
Congregate Care Facility	0 Beds	0	18 Beds	54	-18 Beds	-54
Convenience Market Chain (Open Up to 16 Hours Per Day)	0.0 ksf	0	3.2 ksf	1,589	-3.2 ksf	-1,589
Day Care Center	145 child	725	145 child	725	0 child	0
Elementary School	5,114 Students	9,716	5,114 Students	9,716	0 Students	0
Fast Food (with or without Drive- through)	0.0 ksf	0	8.7 ksf	6,116	-8.7 ksf	-6,116
Fire/Police Station	14.5 ksf	435	14.5 ksf	435	0.0 ksf	0
Government Office (less or equal to 100,000 SF)	22.1 ksf	662	22.1 ksf	662	0.0 ksf	0
Government Office/Civic Center	0.0 ksf	0	18.5 ksf	556	-18.5 ksf	-556
Industrial Park	152.0 ksf	2,280	26.0 ksf	390	126.0 ksf	1,890
Junior High School or Middle School	1,547 Students	2,166	1,547 Students	2,166	0 Students	0
Landscape Open Space (Undeveloped Park)	0.1 Acres	0	0.1 Acres	0	0.0 Acres	0
Library	27.6 ksf	1,378	27.6 ksf	1,378	0.0 ksf	0
Light Industry - General	345.0 ksf	5,175	418.8 ksf	6,282	-73.8 ksf	-1,107
MF Residential less or equal 20 DU/acre	918 DU	7,344	1,466 DU	11,728	-548 DU	-4,384
MF Residential over 20 DU/acre	10,902 DU	65,412	1,916 DU	11,496	8,986 DU	53,916
Mobile Home Park	250 DU	1,250	610 DU	3,050	-360 DU	-1,800



**Table 4-2**  
**Land Use Comparison – Encanto Neighborhoods**  
**Preferred Plan vs. Existing Conditions**

Land Use	Preferred Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Neighborhood Shopping Center (30,000 SF or more)	70.7 ksf	8,479	62.0 ksf	7,436	8.7 ksf	1,043
Office (Low-Rise - 1 ksf to 5 ksf)	4.8 ksf	198	3.3 ksf	134	1.6 ksf	64
Office (Low-Rise - 10 ksf to 15 ksf)	0.0 ksf	0	11.1 ksf	312	-11.1 ksf	-312
Office (Low-Rise - 60 ksf to 65 ksf)	64.0 ksf	1,216	64.0 ksf	1,216	0.0 ksf	0
Office (Low-Rise - 65 ksf to 70 ksf)	66.1 ksf	1,256	71.8 ksf	1,364	-5.7 ksf	-108
Open Space Park or Preserve	207.6 Acres	1,037	201.3 Acres	1,006	6.3 Acres	31
Other Health Care	0.0 ksf	0	22.6 ksf	1,132	-22.6 ksf	-1,132
Other Recreation - High (Developed Park)	0.0 Acres	0	2.8 Acres	140	-2.8 Acres	-140
Other Retail Trade and Strip Commercial	11.4 ksf	455	12.6 ksf	502	-1.2 ksf	-47
Other School	14.5 ksf	261	24.3 ksf	437	-9.8 ksf	-176
Other Transportation	0.0 Acres	0	0.9 Acres	6	-0.9 Acres	-6
Park - Active	62.5 Acres	3,124	60.9 Acres	3,047	1.5 Acres	77
Parking Lot - Surface	0.3 Acres	0	6.6 Acres	0	-6.3 Acres	0
Public Storage	124.9 ksf	250	0.0 ksf	0	124.9 ksf	250
Public/Community Meeting Room Facility (Other Public Services)	21.4 ksf	643	37.8 ksf	1,135	-16.4 ksf	-492
Rail Station/Transit Center	2.8 Acres	833	5.3 Acres	1,596	-2.5 Acres	-763
Religious Facility (without day care)	292.0 ksf	1,458	307.6 ksf	1,537	-15.7 ksf	-79
Restaurant (High Turnover sit- down)	14.4 ksf	1,872	4.2 ksf	552	10.2 ksf	1,320
Senior High School	3,283 Students	5,909	3,283 Students	5,909	0 Students	0
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	12 station	1,860	12 station	1,860	0 station	0
Service Station (with food mart)	26 station	3,900	26 station	3,900	0 station	0
Single Family Detached	7,893 DU	71,037	8,054 DU	72,486	-161 DU	-1,449
Single Family Multiple-Units	1,132 DU	10,188	1,174 DU	10,566	-42 DU	-378
Single Family Residential Without Units	2 DU	0	2 DU	0	0 DU	0

Table 4-2  
Land Use Comparison – Encanto Neighborhoods  
Preferred Plan vs. Existing Conditions

Land Use	Preferred Plan		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Spaced Rural Residential	2 DU	24	2 DU	24	0 DU	0
Supermarket (Stand-alone)	4.4 ksf	660	4.4 ksf	660	0.0 ksf	0
Vacant and Undeveloped Land	1.5 Acres	0	190.3 Acres	0	-188.8 Acres	0
Warehousing	0.0 ksf	0	1.7 ksf	8	-1.7 ksf	-8
<b>TOTAL</b>	-	267,505	-	191,218	-	76,287

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 4-2, the Encanto Neighborhoods Preferred Plan would generate 86,039 more daily vehicle trips when compared to the Existing Conditions, a 39.8% increase.

For comparison purposes, as well as to verify land use growth assumptions within the Encanto Neighborhoods community, manual trip generation calculations by traffic analysis zone (TAZ) were conducted for both the Base Year land uses and the Preferred Plan buildout land uses. The vehicular trip generation growth within the Southeastern San Diego and Encanto Neighborhoods communities are displayed in **Figure 4-1**.

Additionally, a by TAZ comparison of the vehicular trip generation for Base Year vs. Preferred Plan is provided in Appendix A.

As shown in Figure 4 1 and Appendix A, the majority of the TAZs within the Encanto Neighborhoods community are not anticipated to experience much (if any) growth in vehicular trip generation, especially in the northeastern and southeastern area of the community, under buildout of the Preferred Plan. The majority of growth within the community is anticipated to occur near the 47th Street and Euclid Avenue trolley stations within the proposed village district, as well as along the freeway corridors, particularly around Imperial Avenue between I-805 and 61st Street, 47th Street between SR-94 and Imperial Avenue, Euclid Avenue between SR-94 and Imperial Avenue, and Logan Avenue between I-805 and Euclid Avenue. While, the majority of the TAZs within the Southeastern San Diego community are not anticipated to experience much (if any) growth in vehicular trip generation under buildout of the Preferred Plan. The majority of growth within the community is anticipated to occur near the 25th and 32nd trolley stations within the proposed village district, as well as along the freeway corridors, particularly around the southwest quadrant of I-15 and SR-94 connector and the northwest quadrant of I-15 and I-5 connector.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

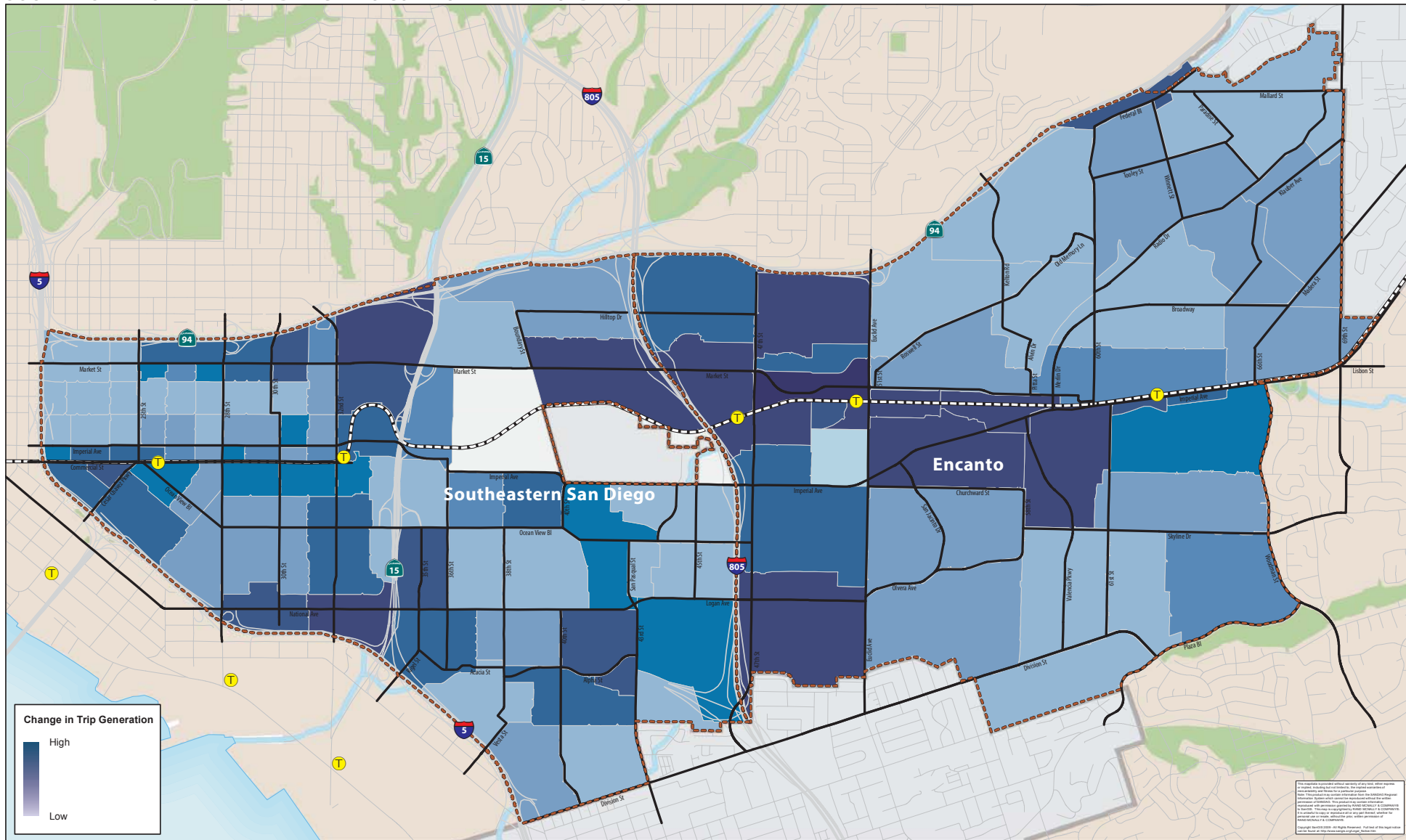


Figure 4-1: Trip Generation Growth by TAZ - Preferred Plan versus Existing Conditions

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## 4.2 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and the Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Southeastern San Diego community, including trips to/from and within the community. **Table 4-3** displays the total VMT generated within the Southeastern San Diego and Encanto Neighborhoods communities and the average trip length under both Preferred Plan and Base Year conditions. VMT calculations for the Southeastern San Diego and Encanto Neighborhoods communities are included as **Appendix J**.

As shown, the Southeastern San Diego community, when compared to the San Diego Region, has significantly shorter trip lengths and daily VMT by population under both the Base Year (Average Trip Length of 1.39 miles vs. 5.18 miles; VMT of 5.10 miles vs. 27.30 miles, respectively) and future buildout scenarios (Average Trip Length of 1.44 miles vs. 5.37 miles; VMT of 5.10 miles vs. 26.90 miles, respectively).

The Encanto Neighborhoods community, when compared to the San Diego Region, has significantly shorter average trip length and daily VMT by population under both the Base Year (Average Trip Length of 2.01 miles vs. 5.18 miles; VMT of 4.30 miles vs. 27.30 miles, respectively) and future buildout scenarios (Average Trip Length of 1.96 miles vs. 5.37 miles; VMT of 3.80 miles vs. 26.90 miles, respectively).

The VMT by population in the Southeastern San Diego community would remain the same, and the VMT by population in the Encanto Neighborhoods community would decrease by 0.50 mile (-11.6%), while the San Diego Region would decrease slightly less, by 0.40 miles (-1.5%).

**Table 4-3**  
**Vehicle Miles Traveled (VMT) Comparison**  
**Preferred Plan vs. Existing Conditions**

Measure	Southeastern San Diego				Encanto Neighborhood				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	291,677	356,250	64,573	22.1%	206,790	293,099	86,309	41.7%	85,331,631	108,419,301	23,087,670	27.1%
Total # of Auto Trips	210,065	248,152	38,087	18.1%	102,915	149,348	46,433	45.1%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length* (miles)	1.39	1.44	0.05	3.4%	2.01	1.96	-0.05	-2.3%	5.18	5.37	0.19	3.6%
Population	56,847	70,020	13,173	23.2%	48,648	76,732	28,084	57.7%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	5.10	5.10	0.00	0.0%	4.30	3.80	-0.50	-11.6%	27.30	26.90	-0.40	-1.5%

Source: SANDAG, Chen Ryan Associates; June 2015

Note:

\*Average trip length is estimated by dividing the total VMT by the total # of auto trips.

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### 4.3 Roadway Segment Analysis

While the majority of roadways in Southeastern San Diego and Encanto Neighborhoods communities would remain the same as the existing cross-sections, the Preferred Plan includes the implementation of roadway widening/restriping in select locations to accommodate high future traffic demands, as well as a number of proposed road diets and lane diets (reducing the number of travel lanes and lane widths) to improve the balance between vehicular, bicycle, and pedestrian mobility across the community. The proposed facility changes include:

#### Roadway Widening

- Market Street, between 47th Street and Euclid Avenue;
- Market Street, between Euclid Avenue and Pitta Street; and
- Euclid Avenue, between SR-94 and Market Street.

#### Roadway Restriping

- Market Street, between I-805 and 47th Street; and
- Division Street, between Harbison Avenue and 58th Street, and between Valencia Parkway and 61st Street.

#### Road/Lane Diet

- Market Street, between 19<sup>th</sup> Street and I-805;
- Market Street, between I-805 SB Ramps and I-805 NB Ramps;
- Imperial Avenue, between I-5 and I-15;
- National Avenue, between 27th Street and 28th Street, and between I-5 NB Ramps and 43rd Street;
- National Avenue/Logan Avenue, between I-5 and the I-805 overpass;
- Imperial Avenue, between I-805 to Community Boundary;
- Logan Avenue, between the 47th Street and Euclid Avenue;
- Skyline Drive, between 61<sup>st</sup> Street and Henson Street;
- 43rd Street, between Newton Avenue and Beta Street;
- 47<sup>th</sup> Street, between SR-94 and Logan Avenue;
- Euclid Avenue, between Imperial Avenue and Community Boundary; and
- Woodman Street, between Skyline Drive and Community Boundary.

**Table 4-4** displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions. The proposed roadway geometrics and forecasted ADT and LOS under buildout of the Preferred Plan are shown in **Figure 4-2** and **Figure 4-3**.

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
1	Hilltop Drive	Boundary Street & I-805	2C MF	8,000	4,700	C	0.59	2,885	B	0.36	0.23	Southeastern	No
2	Hilltop Drive	I-805 & 47th Street	2C MF	8,000	4,700	C	0.59	4,435	C	0.55	0.04	Encanto	No
3	Market Street	17th Street & 19th Street	4C w/ CLTL	30,000	8,300	A	0.28	7,895	A	0.26	0.02	Southeastern	No
4	Market Street	19th Street & 25th Street	2C w/ CLTL	15,000	11,800	D	0.79	7,835	A	0.26	0.53	Southeastern	No
5	Market Street	25th Street & 28th Street	2C w/ CLTL	15,000	13,900	E	0.93	9,604	A	0.32	0.61	Southeastern	Yes
6	Market Street	28th Street & 32nd Street	2C w/ CLTL	15,000	18,100	F	1.21	10,745	B	0.36	0.85	Southeastern	Yes
7	Market Street	32nd Street & I-15 SB Ramps	4M w/ RM	40,000	29,000	C	0.73	17,180	B	0.43	0.3	Southeastern	No
8	Market Street	I-15 SB Ramps & I-15 NB Ramps	4M w/ RM	40,000	27,800	C	0.70	22,320	C	0.56	0.14	Southeastern	No
9	Market Street	I-15 NB Ramps & Boundary Street	4M w/ RM	40,000	31,600	D	0.79	22,310	C	0.56	0.23	Southeastern	No
10	Market Street	Boundary Street & I-805 SB Ramps	2C w/ CLTL	15,000	22,500	F	1.50	14,460	E	0.96	0.54	Southeastern	Yes
11	Market Street	I-805 SB Ramps & I-805 NB Ramps	2C w/ CLTL	15,000	20,200	F	1.35	17,543	B	0.44	0.91	Southeastern/ Encanto	Yes



**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
12	Market Street	I-805 NB Ramps & 47th Street	4M w/ RM	40,000	21,600	C	0.54	14,860	C	0.5	0.04	Encanto	No
13	Market Street	47th Street & Euclid Avenue	4M w/ RM	40,000	22,200	C	0.56	10,022	D	0.67	-0.11	Encanto	No
14	Market Street/Akins Avenue	Euclid Avenue & 60th Street	2C NF	10,000	11,700	F	1.17	11,136	F	1.11	0.06	Encanto	Yes
15	Imperial Avenue	17th Street & 19th Street	4C w/o CLTL	15,000	13,200	E	0.88	6,582	B	0.44	0.44	Southeastern	Yes
16	Imperial Avenue	19th Street & 25th Street	2C Com	8,000	9,700	F	1.21	5,196	B	0.35	0.86	Southeastern	Yes
17	Imperial Avenue	25th Street & 28th Street	2C Com	8,000	9,500	F	1.19	5,257	B	0.35	0.84	Southeastern	Yes
18	Imperial Avenue	28th Street & 30th Street	2C Com	8,000	7,200	E	0.9	5,027	B	0.34	0.56	Southeastern	Yes
19	Imperial Avenue	30th Street & 32nd Street	2C Com	8,000	5,500	D	0.69	4,152	A	0.28	0.41	Southeastern	No
20	Imperial Avenue	32nd Street & 36th Street	2C Com	8,000	10,800	F	1.35	6,555	B	0.44	0.91	Southeastern	Yes
21	Imperial Avenue	36th Street & 40th Street	2C NF	10,000	12,000	F	1.2	7,909	D	0.79	0.41	Southeastern	Yes
22	Imperial Avenue	40th Street & I-805 SB Ramps	4M w/ RM	40,000	25,500	C	0.64	10,301	A	0.26	0.38	Southeastern	No
23	Imperial Avenue	I-805 SB Ramps & I-805 NB Ramps	4M w/ RM	40,000	28,900	C	0.72	25,741	C	0.64	0.08	Southeastern/Encanto	No
24	Imperial Avenue	I-805 NB Ramps & 47th Street	4M w/ RM	40,000	34,400	D	0.86	33,370	D	0.83	0.03	Encanto	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
25	Imperial Avenue	47th Street & Euclid Avenue	4M w/ RM	40,000	31,700	D	0.79	30,600	D	0.77	0.02	Encanto	No
26	Imperial Avenue	Euclid Avenue & San Jacinto Drive	4M w/ RM	40,000	28,900	C	0.72	23,685	C	0.59	0.13	Encanto	No
27	Imperial Avenue	San Jacinto Drive & Valencia Parkway	2C w/ CLTL	15,000	22,800	F	1.52	19,408	F	1.29	0.23	Encanto	Yes
28	Imperial Avenue	Valencia Parkway & Woodman Street	4M w/ RM	40,000	17,800	B	0.45	17,745	B	0.44	0.01	Encanto	No
29	Imperial Avenue	Woodman Street & 69th Street	4M w/ RM	40,000	25,300	C	0.63	16,738	B	0.42	0.21	Encanto	No
30	Imperial Avenue	69th Street & Viewcrest Drive	4M w/ RM	40,000	16,300	B	0.41	8,205	A	0.21	0.2	Encanto (Skyline/ Paradise Hills)	No
31	Commercial Street	17th Street & 19th Street	2C MF	8,000	7,100	E	0.89	1,192	A	0.15	0.74	Downtown	Yes
32	Commercial Street	19th Street & 25th Street	2C MF	8,000	4,900	C	0.61	1,208	A	0.15	0.46	Southeastern	No
33	Commercial Street	25th Street & 28th Street	2C MF	8,000	3,200	B	0.40	1,065	A	0.13	0.27	Southeastern	No
34	Commercial Street	28th Street & 30th Street	2C MF	8,000	3,500	B	0.44	929	A	0.12	0.32	Southeastern	No
35	Commercial Street	30th Street & 32nd Street	2C MF	8,000	3,900	C	0.49	567	A	0.07	0.42	Southeastern	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
36	Ocean View Boulevard	25th Street & 28th Street	2C MF	8,000	6,500	D	0.81	2,207	A	0.28	0.53	Southeastern	No
37	Ocean View Boulevard	28th Street & 30th Street	2C MF	8,000	7,400	E	0.93	5,524	D	0.69	0.24	Southeastern	Yes
38	Ocean View Boulevard	30th Street & 32nd Street	2C w/ CLTL	15,000	9,900	C	0.66	7,985	C	0.53	0.13	Southeastern	No
39	Ocean View Boulevard	32nd Street & I-15 SB Ramps	2C w/ CLTL	15,000	16,500	F	1.10	13,905	E	0.93	0.17	Southeastern	Yes
40	Ocean View Boulevard	I-15 SB Ramps & I-15 NB Ramps	4M w/ RM	40,000	17,900	B	0.45	17,094	B	0.43	0.02	Southeastern	No
41	Ocean View Boulevard	I-15 NB Ramps & 36th Street	2C w/ CLTL	15,000	15,000	E	1.00	13,730	E	0.92	0.08	Southeastern	Yes
42	Ocean View Boulevard	36th Street & 40th Street	2C w/ CLTL	15,000	14,500	E	0.97	12,009	D	0.80	0.17	Southeastern	Yes
43	Ocean View Boulevard	40th Street & 47th Street	2C MF	8,000	11,600	F	1.45	4,965	C	0.62	0.83	Southeastern	Yes
44	National Avenue	Commercial Street & Beardsley Street	2C w/ CLTL	15,000	12,200	D	0.81	2,561	A	0.17	0.64	Barrio Logan	No
45	National Avenue	Beardsley Street & SR-75 Off-Ramp	2C MF	8,000	16,000	F	2.00	3,725	C	0.47	1.53	Barrio Logan	Yes
46	National Avenue	SR-75 Off-Ramp & 26th Street	2C w/ CLTL	15,000	6,300	B	0.42	3,395	A	0.23	0.19	Barrio Logan	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
47	National Avenue	26th Street & 27th Street/I-5 SB Off-Ramp	2C Com	8,000	12,000	F	1.50	11,450	F	1.43	0.07	Barrio Logan	Yes
48	National Avenue	27th Street/I-5 SB Off-Ramp & 28th Street	2C NF	10,000	16,300	F	1.63	15,927	C	0.53	1.10	Southeastern	Yes
49	National Avenue	28th Street & I-5 NB Ramps	2C w/ CLTL	15,000	19,400	F	1.29	18,431	F	1.23	0.06	Southeastern	Yes
50	National Avenue	I-5 NB Ramps & 32nd Street	2C NF	10,000	13,300	F	1.33	10,020	D	0.67	0.66	Southeastern	Yes
51	National Avenue	32nd Street & 43rd Street	2C NF	10,000	13,700	F	1.37	10,572	D	0.70	0.67	Southeastern	Yes
52	Logan Avenue	43rd Street & 45th Street	2C w/ CLTL	15,000	10,600	D	0.71	7,691	C	0.51	0.20	Southeastern	No
53	Logan Avenue	45th Street & 47th Street	4C w/o CLTL	15,000	14,000	E	0.93	8,190	C	0.55	0.38	Southeastern/Encanto	Yes
54	Logan Avenue	47th Street & Euclid Avenue	2C w/ CLTL	15,000	15,900	F	1.06	8,785	A	0.29	0.77	Encanto	Yes
55	Acacia Street	36th Street & 38th Street	2C MF	8,000	3,900	C	0.49	1,451	A	0.18	0.31	Southeastern	No
56	Alpha Street	38th Street & 43rd Street	2C MF	8,000	7,000	E	0.88	5,554	D	0.69	0.19	Southeastern	Yes
57	Division Street	Main Street & Osborn Street	2C w/ CLTL	15,000	16,700	F	1.11	15,920	F	1.06	0.05	Southeastern	Yes
58	Division Street	Osborn Street & Highland Avenue	2C w/ CLTL	15,000	12,700	D	0.85	10,265	D	0.68	0.17	Southeastern	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
59	Division Street	Highland Avenue & Palm Avenue	4S	30,000	13,700	B	0.46	10,466	B	0.35	0.11	National City	No
60	Division Street	Palm Avenue & Euclid Avenue	4M w/ RM	40,000	18,800	B	0.47	17,370	B	0.43	0.04	National City	No
61	Division Street	Euclid Avenue & Harbison Avenue	4C w/ CLTL	30,000	13,400	B	0.45	12,780	B	0.43	0.02	National City	No
62	Division Street	Harbison Avenue & 58th Street	2C w/ CLTL	15,000	14,300	E	0.95	11,225	F	1.40	-0.45	Encanto	No
63	Division Street	58th Street & Valencia Parkway	2C w/ CLTL	15,000	13,500	E	0.90	10,678	D	0.71	0.19	Encanto	Yes
64	Division Street	Valencia Parkway & 61st Street	2C w/ CLTL	15,000	9,600	C	0.64	9,115	F	1.14	-0.50	Encanto	No
65	Division Street	61st Street & Plaza Boulevard	2C w/ CLTL	15,000	8,200	C	0.55	6,555	B	0.44	0.11	Encanto	No
66	Cesar Chavez Parkway	Commercial Street & I-5 NB Ramps	2C MF	8,000	10,300	F	1.29	5,692	D	0.71	0.58	Southeastern	Yes
67	Cesar Chavez Parkway	I-5 NB & SR-75 On-Ramp/Logan Avenue	4S	30,000	17,300	C	0.58	13,771	B	0.46	0.12	Barrio Logan	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
68	25th Street	SR-94 WB Off-Ramp & SR-94 EB On-Ramp	2C w/ CLTL	15,000	18,700	F	1.25	12,970	D	0.86	0.39	Southeastern	Yes
69	25th Street	SR-94 EB On-Ramp & Market Street	2C w/ CLTL	15,000	19,500	F	1.30	10,914	D	0.73	0.57	Southeastern	Yes
70	25th Street	Market Street & Imperial Avenue	2C w/ CLTL	15,000	19,200	F	1.28	9,150	C	0.61	0.67	Southeastern	Yes
71	25th Street	Imperial Avenue & Commercial Street	2C w/ CLTL	15,000	12,500	D	0.83	5,703	B	0.71	0.12	Southeastern	No
72	28th Street	SR-94 WB Ramps & SR-94 EB Ramps	2C MF	8,000	11,100	F	1.39	10,183	F	1.27	0.12	Southeastern	Yes
73	28th Street	SR-94 EB Ramps & Market Street	2C MF	8,000	11,700	F	1.46	10,041	F	1.26	0.20	Southeastern	Yes
74	28th Street	Market Street & Imperial Avenue	2C MF	8,000	8,600	F	1.08	7,494	E	0.94	0.14	Southeastern	Yes
75	28th Street	Imperial Avenue & Commercial Street	2C MF	8,000	5,900	D	0.74	5,300	D	0.66	0.08	Southeastern	No
76	28th Street	Commercial Street & Ocean View Boulevard	2C MF	8,000	7,100	E	0.89	4,965	C	0.62	0.27	Southeastern	Yes

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
77	28th Street	Ocean View Boulevard & National Avenue	2C MF	8,000	11,600	F	1.45	8,195	F	1.02	0.43	Southeastern	Yes
78	28th Street	National Avenue & Boston Avenue	2C w/ CLTL	15,000	27,700	F	1.85	14,165	E	0.94	0.91	Barrio Logan	Yes
79	30th Street	E Street & Imperial Avenue	2C MF	8,000	7,900	E	0.99	4,945	C	0.62	0.37	Southeastern	Yes
80	30th Street	Imperial Avenue & Commercial Street	2C MF	8,000	4,700	C	0.59	2,993	B	0.37	0.22	Southeastern	No
81	30th Street	Commercial Street & National Avenue	2C MF	8,000	5,000	C	0.63	4,826	C	0.6	0.03	Southeastern	No
82	Broadway/32nd Street	SR-94 WB & SR-94 EB On-Ramp / F Street	2C w/ CLTL	15,000	11,500	D	0.77	11,468	D	0.76	0.01	Southeastern	No
83	32nd Street	SR-94 EB On-Ramp/F Street & Market Street	2C MF	8,000	11,700	F	1.46	6,076	D	0.76	0.70	Southeastern	Yes
84	32nd Street	Market Street & Imperial Avenue	2C MF	8,000	9,000	F	1.13	5,116	D	0.64	0.49	Southeastern	Yes



**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
85	32nd Street	Imperial Avenue & Commercial Street	2C MF	8,000	5,800	D	0.73	3,134	B	0.39	0.34	Southeastern	No
86	32nd Street	Commercial Street & Ocean View Boulevard	2C MF	8,000	6,300	D	0.79	3,975	C	0.50	0.29	Southeastern	No
87	32nd Street	Ocean View Boulevard & National Avenue	2C MF	8,000	6,900	E	0.86	4,442	C	0.56	0.30	Southeastern	Yes
88	32nd Street	National Avenue & Boston Avenue	2C MF	8,000	9,200	F	1.15	5,420	D	0.68	0.47	Southeastern	Yes
89	35th Street/Rigel Street	Ocean View Boulevard & Main Street	2C MF	8,000	10,600	F	1.33	7,520	E	0.94	0.39	Southeastern	Yes
90	36th Street	Imperial Avenue & Ocean View Boulevard	2C MF	8,000	4,000	C	0.50	3,447	B	0.43	0.07	Southeastern	No
91	36th Street	Ocean View Boulevard & Acacia Street	2C MF	8,000	4,300	C	0.54	3,410	B	0.43	0.11	Southeastern	No
92	36th Street	Ocean View Boulevard & Acacia Street	2C MF	8,000	3,800	C	0.48	3,585	C	0.45	0.03	Southeastern	No
93	Vesta Street	Acacia Street & Main Street	2C MF	8,000	6,000	D	0.75	3,970	C	0.5	0.25	Southeastern	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
94	40th Street	Imperial Avenue & Ocean View Boulevard	4C w/o CLTL	15,000	4,800	A	0.32	4,425	A	0.30	0.02	Southeastern	No
95	40th Street	National Avenue & Division Street	2C MF	8,000	3,700	C	0.46	1,966	A	0.25	0.21	Southeastern	No
96	Boundary Street	Hilltop Drive & Market Street	2C MF	8,000	2,900	B	0.36	2,060	A	0.26	0.10	Southeastern	No
97	San Pasqual Drive	Imperial Avenue & Ocean View Boulevard	2C NF	10,000	6,500	C	0.65	5,479	B	0.55	0.10	Southeastern	No
98	San Pasqual Drive	Ocean View Boulevard & Logan Avenue	2C NF	10,000	11,400	F	1.14	5,535	C	0.55	0.59	Southeastern	Yes
99	43rd Street	Logan Avenue & Newton Avenue	2C w/ CLTL	15,000	14,000	E	0.93	13,301	E	0.89	0.04	Southeastern	Yes
100	43rd Street	Newton Avenue & Beta Street	4C w/o CLTL	15,000	16,100	F	1.07	12,835	C	0.57	0.50	Southeastern	Yes
101	43rd Street	Beta Street & Delta Street	2C w/ CLTL	15,000	25,500	F	1.70	17,249	F	1.15	0.55	Southeastern	Yes
102	43rd Street	Delta Street & Division Street	3C w/ CLTL	22,500	21,300	E	0.71	15,360	D	0.68	0.03	Southeastern	Yes
103	Highland Avenue	Division Street & 4th Street	4S	30,000	20,900	D	0.70	12,990	B	0.43	0.27	National City	No
104	45th Street	Imperial Avenue & Logan Avenue	2C MF	8,000	2,900	B	0.36	1,955	A	0.24	0.12	Southeastern	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
105	Mallard Street	Federal Boulevard & 69th Street	2C Com	8,000	8,200	F	1.03	7,510	E	0.94	0.09	Encanto	Yes
106	Federal Blvd	60th Street & Mallard Street	4C w/ CLTL	30,000	17,300	C	0.58	17,190	C	0.57	0.01	Encanto	No
107	Federal Blvd	Mallard Street & MacArthur Drive	3C w/ CLTL	15,000	11,000	D	0.73	10,880	C	0.48	0.25	Encanto	No
108	Tooley Street	60th Street & Paradise Street	2C MF	8,000	600	A	0.08	463	A	0.06	0.02	Encanto	No
109	Roswell Street	51st Street & Old Memory Lane	2C MF	8,000	2,900	B	0.36	1,015	A	0.13	0.23	Encanto	No
110	Old Memory Lane	Roswell Street & 60th Street	2C MF	8,000	1,400	A	0.18	1,303	A	0.16	0.02	Encanto	No
111	Radio Drive	60th Street & Mallard Street	2C MF	8,000	1,200	A	0.15	460	A	0.06	0.09	Encanto	No
112	Klauber Avenue	Broadway & 69th Street	2C MF	8,000	1,000	A	0.13	919	A	0.11	0.02	Encanto	No
113	Broadway	60th Street & Madera Street	2C MF	8,000	3,600	C	0.45	2,600	B	0.33	0.12	Encanto	No
114	Lisbon Street	Imperial Avenue & 71st Street	2C w/ CLTL	15,000	15,500	F	1.03	8,522	C	0.57	0.46	Encanto (Skyline/ Paradise Hills)	Yes
115	Churchward Street/58th Street	Euclid Avenue & Skyline Drive	2C MF	8,000	5,100	D	0.64	2,007	A	0.25	0.39	Encanto	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
116	Skyline Drive	58th Street & Valencia Parkway	2C w/ CLTL	15,000	9,600	C	0.64	6,760	B	0.45	0.19	Encanto	No
117	Skyline Drive	Valencia Parkway & 61st Street	2C w/ CLTL	15,000	16,400	F	1.09	10,910	D	0.73	0.36	Encanto	Yes
118	Skyline Drive	61st Street & Omeara Street	2C w/ CLTL	15,000	13,300	E	0.89	11,474	D	0.76	0.13	Encanto	Yes
119	Skyline Drive	Omeara Street & Woodman Street	2C w/ CLTL	15,000	12,900	D	0.86	11,700	D	0.78	0.08	Encanto	No
120	Skyline Drive	Woodman Street & 69th Street	2C w/ CLTL	15,000	11,900	D	0.79	11,665	B	0.39	0.40	Skyline/ Paradise Hills	No
121	Olvera Avenue/58th Street	Euclid Avenue & Skyline Drive	2C MF	8,000	7,700	E	0.96	5,190	D	0.65	0.31	Encanto	Yes
122	Plaza Boulevard	Paradise Valley Road & Division Street	4C	15,000	9,500	C	0.63	4,700	A	0.31	0.32	Encanto	No
123	Plaza Boulevard	Division Street & Woodman Street	2C NF	10,000	9,600	E	0.96	6,190	B	0.62	0.34	Encanto	Yes
124	47th Street	SR-94 EB On-Ramp & Market Street	2C w/ CLTL	15,000	19,000	F	1.27	12,263	B	0.41	0.86	Encanto	Yes
125	47th Street	Market Street & Imperial Avenue	2C w/ CLTL	15,000	17,300	F	1.15	10,145	D	0.68	0.47	Encanto	Yes

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
126	47th Street	Imperial Avenue & Logan Avenue	2C w/ CLTL	15,000	16,600	F	1.11	10,870	B	0.36	0.75	Encanto	Yes
127	47th Street	Logan Avenue & I-805 NB Ramps	2C w/ CLTL	15,000	17,200	F	1.15	9,465	B	0.42	0.73	Encanto	Yes
128	47th Street	I-805 NB Ramps & I-805 SB Ramps	4M w/ RM	40,000	21,200	C	0.53	15,469	B	0.39	0.14	Encanto/ National City	No
129	47th Street / Palm Avenue	I-805 SB Ramps & Division Street	4M w/ RM	40,000	27,900	C	0.7	21,748	C	0.54	0.16	National City	No
130	Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	4M w/ RM	40,000	34,200	D	0.86	28,950	C	0.72	0.14	Encanto	No
131	Euclid Avenue	SR-94 EB Ramps & Market Street	4M w/ RM	40,000	30,800	D	0.77	25,364	E	0.85	-0.08	Encanto	No
132	Euclid Avenue	Market Street & Imperial Avenue	4M w/ RM	40,000	27,700	C	0.69	20,933	D	0.70	-0.01	Encanto	No
133	Euclid Avenue	Imperial Avenue & Logan Avenue	4C w/ CLTL	30,000	14,100	C	0.47	11,000	B	0.37	0.10	Encanto	No
134	Euclid Avenue	Logan Avenue & Division Street	4C w/ CLTL	30,000	13,600	C	0.45	10,655	A	0.27	0.18	Encanto/ National City	No
135	51st Street	Market Street & Roswell Street	2C NF	10,000	4,000	A	0.40	2,252	A	0.23	0.17	Encanto	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
136	San Jacinto Drive	Imperial Avenue & Olvera Avenue	2C MF	8,000	3,800	C	0.48	1,848	A	0.23	0.25	Encanto	No
137	Bayview Heights Way	SR-94 WB Ramps & SR-94 EB Ramps	2C NF	10,000	17,100	F	1.71	11,160	F	1.12	0.59	Encanto	Yes
138	Kelton Road	SR-94 EB Ramps & Alvin Street	2C MF	8,000	12,900	F	1.61	3,840	D	0.48	1.13	Encanto	Yes
139	Alvin Street	Kelton Road & Pitta Street	2C MF	8,000	9,800	F	1.23	1,164	A	0.15	1.08	Encanto	Yes
140	Pitta Street	Alvin Street & Market Street	2C MF	8,000	10,000	F	1.25	3,013	B	0.38	0.87	Encanto	Yes
141	Merlin Drive	Broadway & Imperial Avenue	2C MF	8,000	4,700	C	0.59	4,455	C	0.56	0.03	Encanto	No
142	Valencia Parkway	Imperial Avenue & Skyline Drive	4M w/ RM	40,000	7,800	A	0.20	7,059	A	0.18	0.02	Encanto	No
143	Valencia Parkway	Skyline Drive & Cervantes Avenue	4C	15,000	5,600	B	0.37	3,645	A	0.24	0.13	Encanto	No
144	Valencia Parkway	Cervantes Avenue & Wesmead Street	4C	15,000	6,200	B	0.41	4,443	A	0.30	0.11	Encanto	No
145	Valencia Parkway	Wesmead Street & Division Street	2C MF	8,000	6,200	D	0.78	4,399	C	0.55	0.23	Encanto	No

**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
146	60th Street	Federal Boulevard & Imperial Avenue	2C MF	8,000	11,700	F	1.46	5,050	D	0.63	0.83	Encanto	Yes
147	61st Street	Imperial Avenue & Division Street	2C MF	8,000	7,700	E	0.96	4,915	C	0.61	0.35	Encanto	Yes
148	Winnett Street	Federal Boulevard & Radio Drive	2C MF	8,000	3,300	B	0.41	2,649	B	0.33	0.08	Encanto	No
149	Paradise Street	Mallard Street & Radio Drive	2C MF	8,000	900	A	0.11	715	A	0.09	0.02	Encanto	No
150	Madera Street	Massachusetts Avenue & 69th Street	2C MF	8,000	3,500	B	0.44	3,469	B	0.43	0.01	Lemon Grove	No
151	Madera Street/66th Street	69th Street & Akins Avenue	2C MF	8,000	4,200	C	0.53	3,150	B	0.39	0.14	Encanto	No
152	Woodman Street	Imperial Avenue & Skyline Drive	2C Com	8,000	10,800	F	1.35	6,951	E	0.87	0.48	Encanto	Yes
153	Woodman Street	Skyline Drive & Plaza Boulevard	4M w/ RM	40,000	12,900	A	0.32	9,290	A	0.23	0.09	Encanto	No
154	Woodman Street	Plaza Blvd & Paradise Valley Road	4M w/ RM	40,000	17,600	B	0.44	16,730	B	0.42	0.02	Encanto (Skyline/ Paradise Hills)	No
155	69th Street	San Miguel Avenue & Mallard Street	2C MF	8,000	5,600	D	0.70	5,389	D	0.67	0.03	Lemon Grove	No



**Table 4-4  
Roadway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

#	Roadway	Segment	Preferred Plan					Existing Conditions			Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	ADT	LOS	V/C			
156	70th Street	Mallard Street & Imperial Avenue	2C MF	8,000	4,700	C	0.59	4,000	C	0.5	0.09	Encanto	No
157	71st Street	Imperial Avenue & Skyline Drive	2C MF	8,000	4,700	C	0.59	3,363	B	0.42	0.17	Encanto (Skyline/ Paradise Hills)	No

Source: Chen Ryan Associates; June 2015

Notes:

- SI = Significant Impact?
- RM = Raised Median
- 4M - Major Arterial (4-lane, divided)
- 4-S/4C + CLTL = Secondary Arterial / Collector (4-lane w/ center lane)
- 4C = Collector (4-lane w/o center lane)
- 2C + CLTL = Collector (2-lane w/ continuous left-turn lane)
- 2C NF = Collector (2-lane no fronting property)
- 2C Com = Collector (2-lane w/ commercial fronting)
- 2C MF = Collector (2-lane multi-family)

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

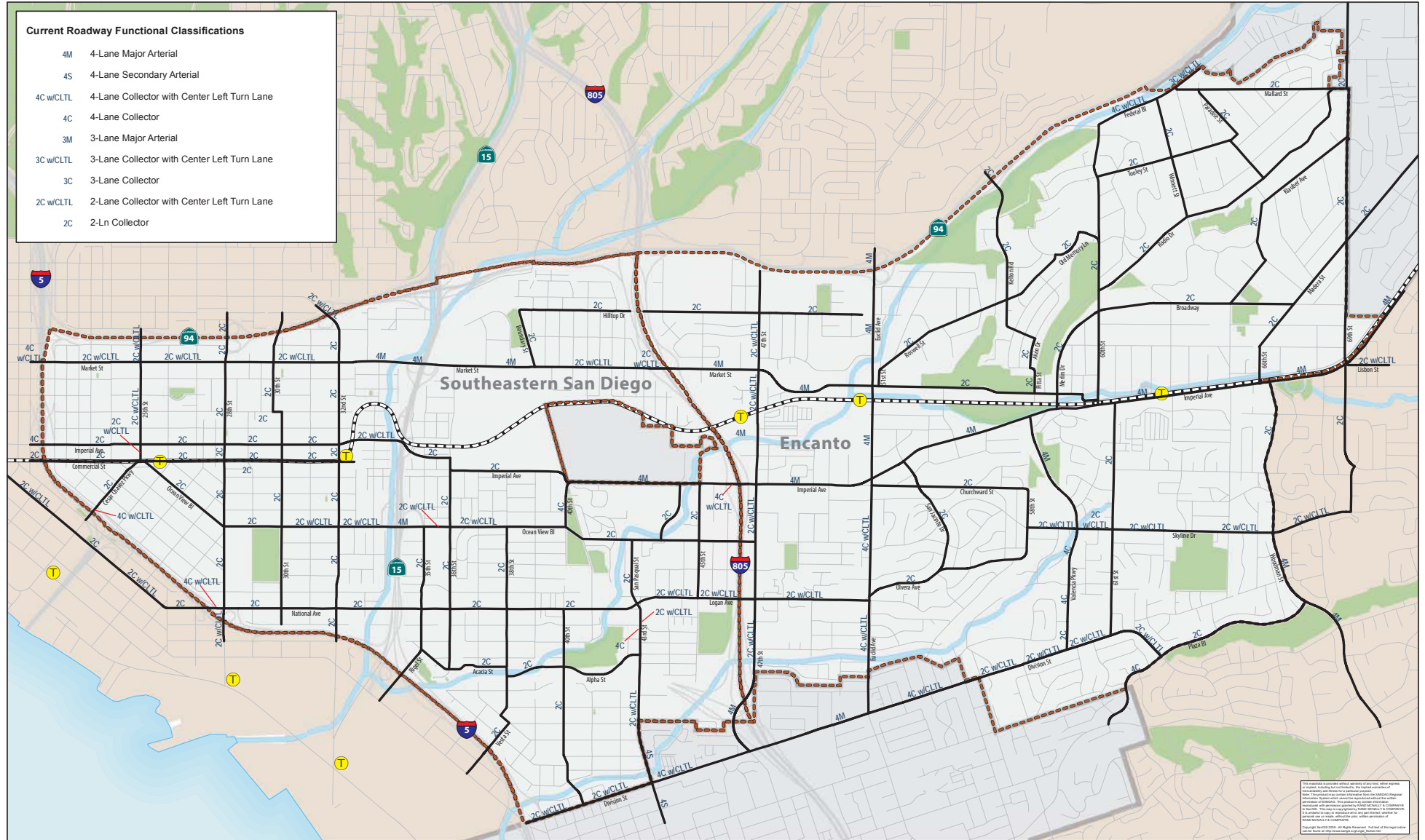


Figure 4-2: Preferred Plan Roadway Network

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

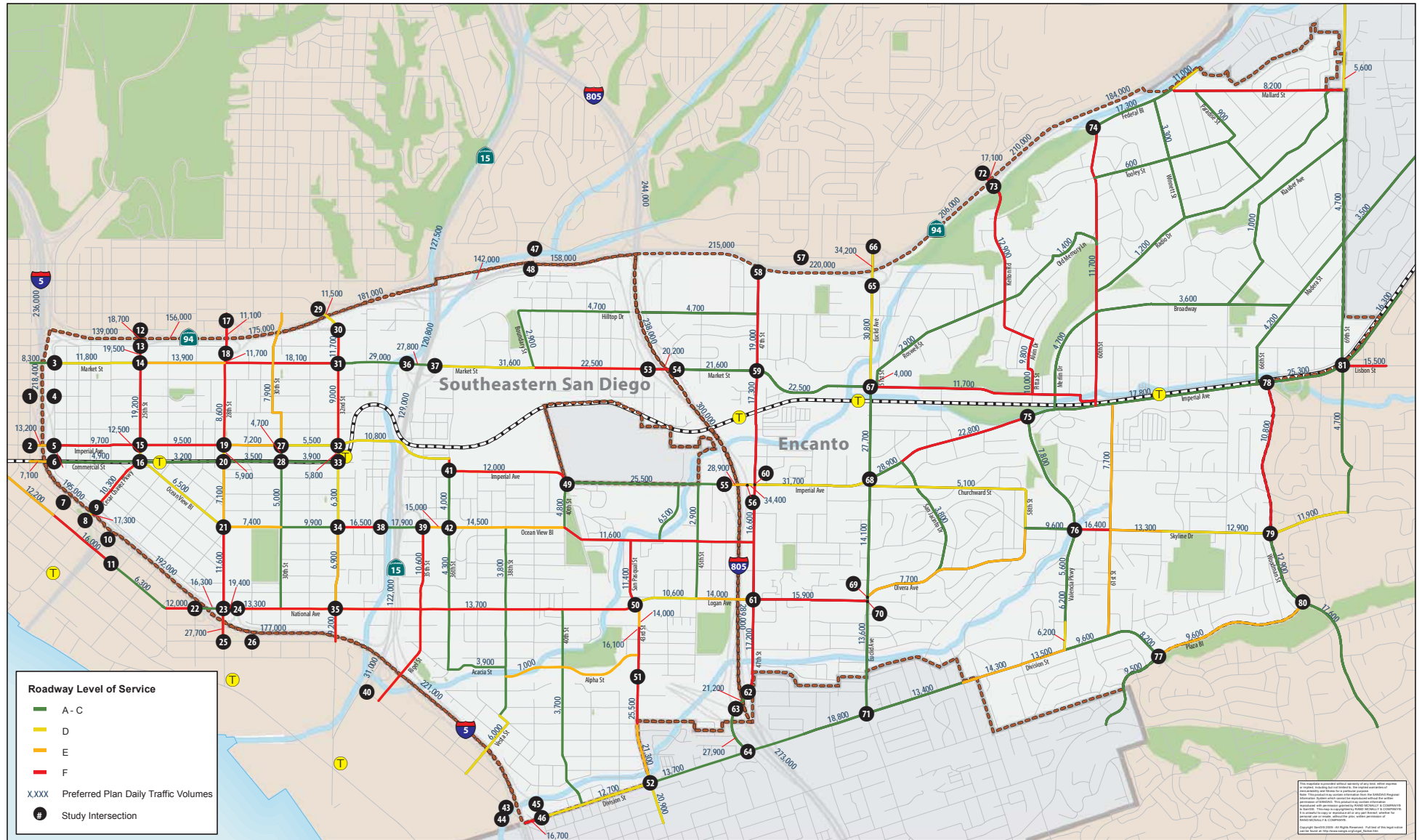


Figure 4-3: Preferred Plan Roadway Traffic Volumes and Level of Service

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In conclusion, assuming the proposed roadway diets and widening under the Preferred Plan, the following sixty-eight (68) study area roadway segments are projected to operate at LOS E or F under buildout of the Preferred Plan, including thirty-nine (39) roadway segments located within Southeastern San Diego, twenty-two (22) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence. They are as follow:

*Southeastern San Diego*

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street (LOS E);
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street (LOS F);
10. Market Street, between Boundary Street and I-805 SB Ramps (LOS F);
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street (LOS E);
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street (LOS F);
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street (LOS F);
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street (LOS E);
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street (LOS F);
21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street (LOS F);
37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street (LOS E);
39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps (LOS F);
41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street (LOS E);
42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street (LOS E);
48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street (LOS F);
49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps (LOS F);
50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street (LOS F);
51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street (LOS F);
57. Division Street, between Main Street and Osborn Street (LOS F);
56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street (LOS E);
66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps (LOS F);
68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp (LOS F);
69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street (LOS F);
70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);
73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street (LOS F);
74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard (LOS E);
77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue (LOS F);
79. 30<sup>th</sup> Street, between E Street and Imperial Avenue (LOS E);
83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street (LOS F);
84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue (LOS F);
87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue (LOS E);
88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue (LOS F);
89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street (LOS F);
99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue (LOS E);
100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street (LOS F);



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101. 43<sup>rd</sup> Street, between Beta Street and Delta Street (LOS F);
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street (LOS E); and
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street (LOS F).

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street (LOS F);
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway (LOS F);
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue (LOS F);
62. Division Street, between Harbison Avenue and 58<sup>th</sup> Street (LOS E);
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway (LOS E);
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street (LOS F);
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street (LOS F);
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street (LOS E);
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive (LOS E);
123. Plaza Boulevard, between Division Street and Woodman Street (LOS E);
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street (LOS F);
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue (LOS F);
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps (LOS F);
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);
138. Kelton Road, between SR-94 EB Ramps and Alvin Street (LOS F);
139. Alvin Street, between Kelton Road and Pitta Street (LOS F);
140. Pitta Street, between Alvin Street and Market Street (LOS F);
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue (LOS F);
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street (LOS E); and
152. Woodman Street, between Imperial Avenue and Skyline Drive (LOS F).

#### Southeastern San Diego & Encanto Neighborhoods

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps (LOS F);
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street (LOS F); and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street (LOS E).

#### Sphere of Influence

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street (LOS E);
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp (LOS F);
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street (LOS F); and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue (LOS F).

Based on the criteria documented in Chapter 2, the Preferred Plan would have a significant impact to all sixty-eight (68) roadway segments listed above, with the exception of Division Street, between Harbison Avenue and 58<sup>th</sup> Street.

## Arterial Analysis

As shown in the previous section, the proposed roadway diets along Market Street, Imperial Avenue, National Avenue, Logan Avenue, 47<sup>th</sup> Street and Euclid Avenue are projected to degrade daily roadway operations to undesirable LOS E or F along the majority of the roadway. However, roadway LOS is generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. Often, a roadway segment that operates at LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized to provide a more accurate indication of LOS. Therefore to better understand the true impacts of the proposed roadway diets, peak hour arterial analyses were conducted for roadways in which a reduction in vehicular travel lanes is proposed.

**Table 4-5** displays peak hour arterial analyses for all facilities in which a roadway diet is proposed under buildout of the Preferred Plan alternative. Peak hour arterial analysis worksheets are provided in **Appendix K**.

Table 4-5  
Preferred Plan Arterial Analysis Along Urban Streets

Roadway	Segment	AM Peak Hour				PM Peak Hour				Community
		NB/EB		SB/WB		NB/EB		SB/WB		
		Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	
Market Street	19th Street & 25th Street	21.8	C	24.6	B	18.7	B	21.2	C	Southeastern
	25th Street & 28th Street	31.4	A	20.7	C	26.1	B	25.5	B	Southeastern
	28th Street & 32nd Street	31.4	A	20.7	C	26.1	B	25.5	B	Southeastern
	32nd Street & I-15 SB Ramps	16.0	D	20.1	C	10.7	E	17.4	D	Southeastern
	I-15 SB Ramps & I-15 NB Ramps	10.6	E	11.2	E	6.6	F	14.2	D	Southeastern
	I-15 NB Ramps & I-805 SB Ramps	27.4	B	32.5	A	15.6	D	33.5	A	Southeastern
	I-805 SB Ramps & I-805 NB Ramps	18.1	C	13.7	E	11	E	12.2	E	Southeastern / Encanto
	I-805 SB Ramps & I-805 NB Ramps	18.2	C	16.8	D	11.1	E	16.2	D	Encanto
	I-805 NB Ramps & 47th Street	23.6	C	14.6	D	18	D	16.5	D	Encanto
	47th Street & Euclid Avenue	26.5	B	21.6	C	18.2	C	22.7	C	Encanto
Imperial Avenue	17th Street & 19th Street	17.0	D	17.7	D	15.5	D	17.3	D	Southeastern
	19th Street & 25th Street	23.8	C	21	C	19.2	C	23.5	C	Southeastern
	25th Street & 28th Street	24.7	B	20.8	C	22.6	C	22.1	C	Southeastern
	28th Street & 30th Street	24.9	B	19.9	C	22.8	C	19.9	C	Southeastern
	30th Street & 32nd Street	20.9	C	22.2	C	16.9	D	21.5	B	Southeastern

**Table 4-5  
Preferred Plan Arterial Analysis Along Urban Streets**

Roadway	Segment	AM Peak Hour				PM Peak Hour				Community
		NB/EB		SB/WB		NB/EB		SB/WB		
		Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	
	32nd Street & 36th Street	19.5	C	18.9	C	20.2	C	21.4	C	Southeastern
	36th Street & 40th Street	14.3	D	18.2	C	12.7	E	17.9	D	Southeastern
	40th Street & I-805 SB Ramps	22.8	C	22.6	C	25.6	B	16.9	D	Southeastern
	I-805 SB Ramps & I-805 NB Ramps	24.4	B	18.0	C	20.1	C	16.6	D	Southeastern / Encanto
National Avenue	27th Street/I-5 SB Off-Ramp & 28th Street	25.5	B	22.3	C	24.4	B	21.0	C	Southeastern
	28th Street & I-5 NB Ramps	3.8	F	3.3	F	4.3	F	4.6	F	Southeastern
	I-5 NB Ramps & 32nd Street	24.7	B	17.3	D	21.7	C	15.0	D	Southeastern
	32nd Street & 43rd Street	26.2	B	27.9	B	25.8	B	28.3	B	Southeastern
Logan Avenue	43rd Street & 45th Street	23.8	C	20.6	C	21.7	C	20.6	C	Southeastern
	45th Street & 47th Street	23.8	C	20.6	C	21.7	C	20.6	C	Southeastern / Encanto
	45th Street & 47th Street	23.8	C	20.6	C	21.7	C	20.6	C	Southeastern / Encanto
	47th Street & Euclid Avenue	17.9	D	20.5	C	13.1	E	20.5	C	Encanto
Skyline Drive	58th Street & Valencia Parkway	20.1	C	18.3	B	17.1	D	20.5	C	Encanto
	Valencia Parkway & 61st Street	20.6	C	25.8	B	25.4	B	27.7	B	Encanto
	61st Street & Omeara Street	20.6	C	22.4	C	25.4	B	27.7	B	Encanto
	Omeara Street & Woodman Street	20.6	C	22.4	C	25.4	B	27.7	B	Encanto
	Woodman Street & 69th Street	29.4	B	7.5	F	30.1	A	25.3	B	Encanto
47th Street	SR-94 EB On-Ramp & Market Street	34.0	B	21.6	D	34.0	B	18.7	D	Encanto
	Market Street & Imperial Avenue	21.1	D	17.3	D	22.0	D	21.1	D	Encanto
	Imperial Avenue & Logan Avenue	18.9	D	25.8	C	24.9	D	24.5	C	Encanto
47th Street	Logan Avenue & I-805 NB Ramps	21.8	C	24.5	C	25.4	C	34.8	B	Encanto
	I-805 NB Ramps & I-805 SB Ramps	26.6	C	22.7	C	23.5	C	10.7	F	Southeastern / Encanto
Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	21.8	C	21.5	C	21.2	C	18.5	C	Encanto



**Table 4-5  
Preferred Plan Arterial Analysis Along Urban Streets**

Roadway	Segment	AM Peak Hour				PM Peak Hour				Community
		NB/EB		SB/WB		NB/EB		SB/WB		
		Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	
	SR-94 EB Ramps & Market Street	25.6	B	16.7	D	24.7	B	13.8	E	Encanto
	Market Street & Imperial Avenue	19.5	C	16.9	D	17.6	D	18.8	C	Encanto
	Imperial Avenue & Logan Avenue	17.4	D	11.8	E	20.4	C	13.7	E	Encanto
	Logan Avenue & Division Street	26.3	B	17.7	D	27.1	B	15.7	D	Encanto

Source: Chen Ryan Associates; June 2015

Note:  
Bold letter indicates segment LOS E or F.

As shown in the table, the majority of segments in which a roadway diet is proposed are projected to operate at LOS D or better during both the AM and PM peak hours. There would be some minor pinch points along the roadways; however, roadway speeds are not anticipated to drop below 10 mph hour, with the exception of the following segments:

- Eastbound Market Street, between I-15 SB Ramps & I-15 NB Ramps (AM: LOS F, 6.6 mph);
- Eastbound National Avenue, between 27th Street & I-5 NB Ramps (AM: LOS F, 3.8 mph / PM: LOS F, 4.3 mph); and
- Westbound National Avenue, between 27th Street & I-5 NB Ramps (AM: LOS F, 3.3 mph / PM: LOS F, 4.6 mph).

#### **4.4 Intersection Analysis**

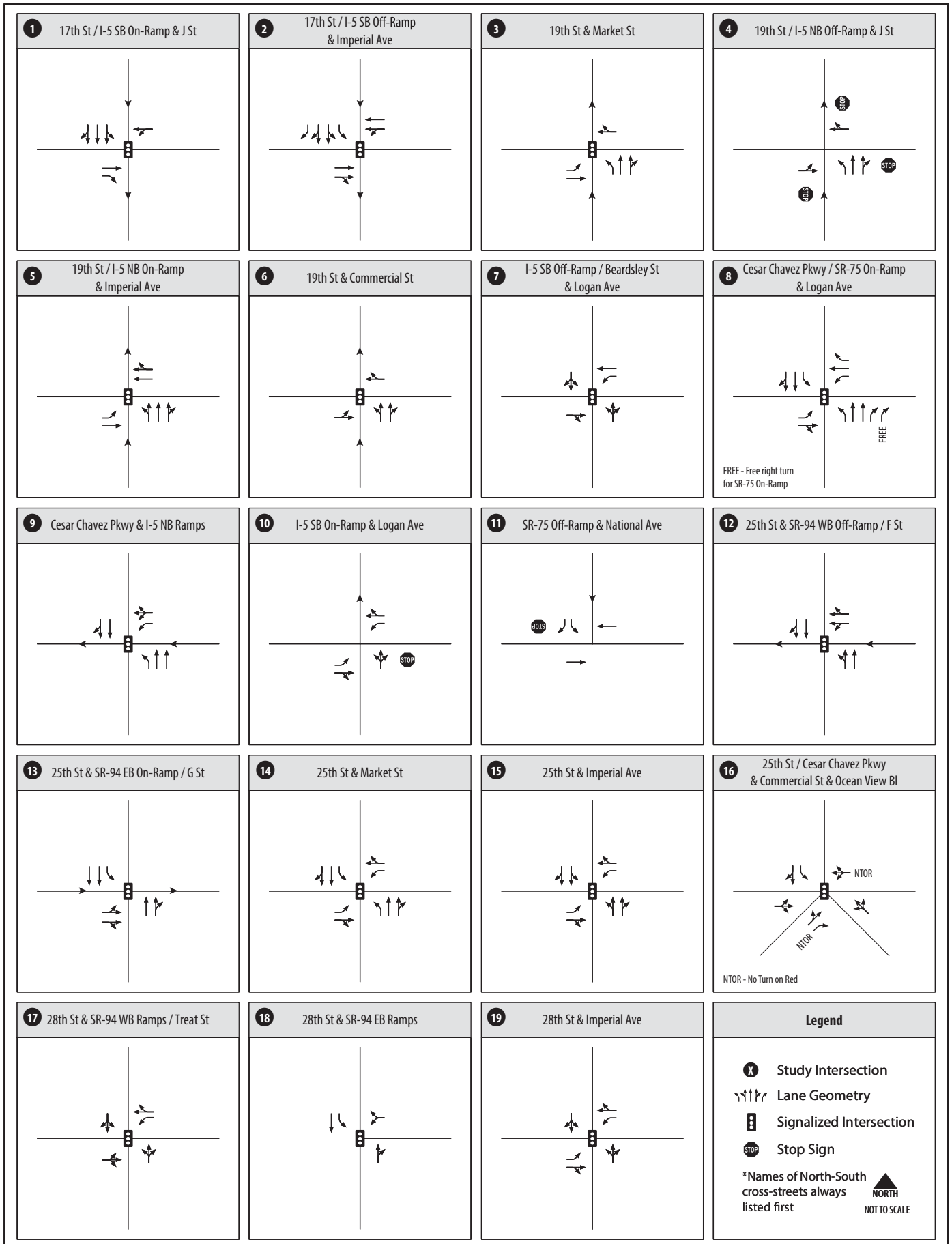
AM and PM peak hour intersection LOS analyses were conducted for both the Preferred Plan and Existing Conditions. It was assumed that a number of intersection improvements would be in place under the buildout of the Preferred Plan, as listed below:

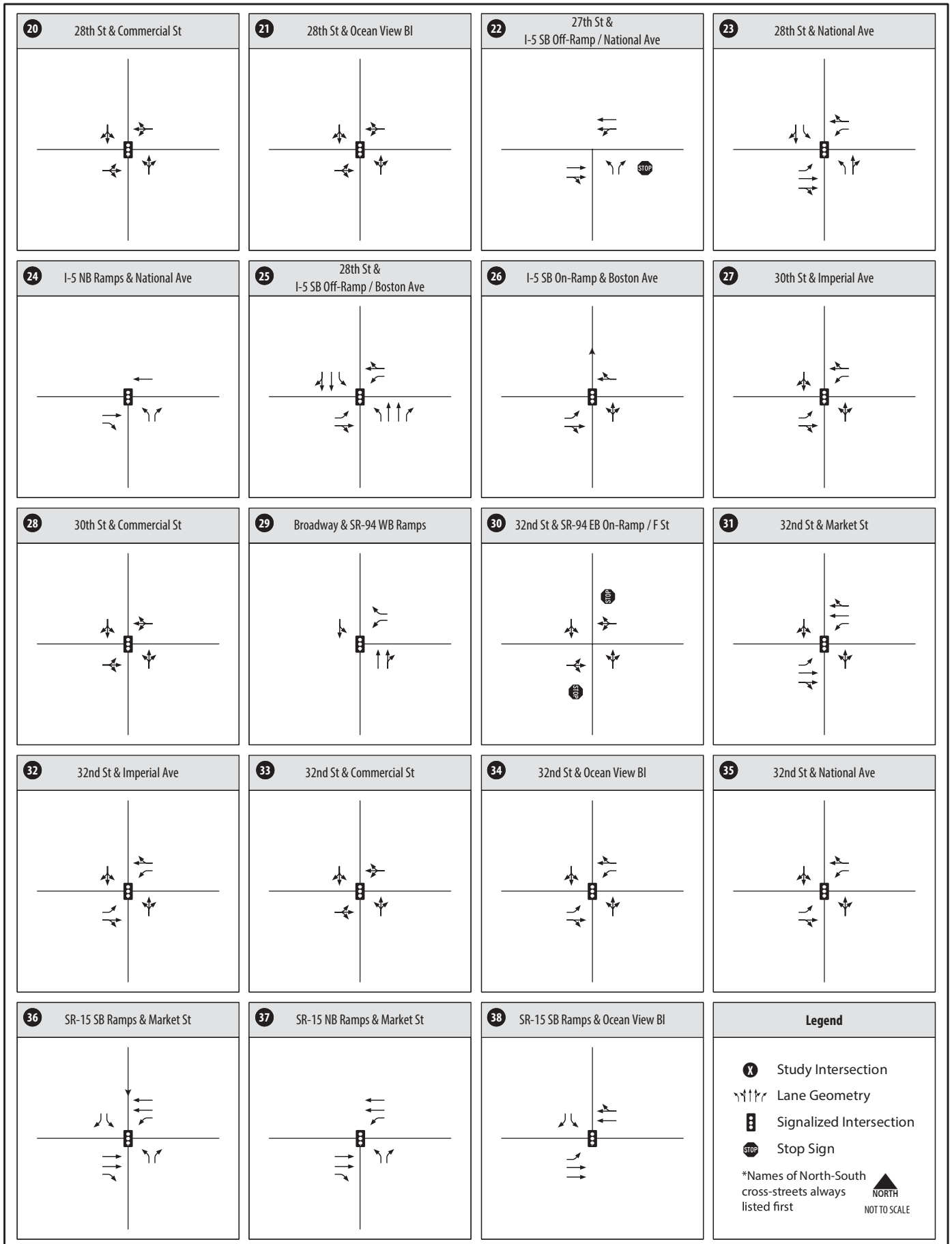
- 19th Street / I-5 NB Off-Ramp / J Street – Restripe the NB left-turn lane into a NB left-through shared lane;
- I-5 SB On-Ramp / Logan Avenue – prohibit through/left turn movements during the AM and PM peak hour;
- 25th Street / SR-94 WB Off-Ramp/F Street – Signalize intersection;
- 25th Street / SR-94 EB On-Ramp/G Street – Signalize intersection;
- 28th Street / SR-94 WB Ramps/Treat Street – Signalize intersection and restripe WB approach to include an exclusive left-turn lane;
- 28th Street / SR-94 EB On-Ramp – Signalize intersection;

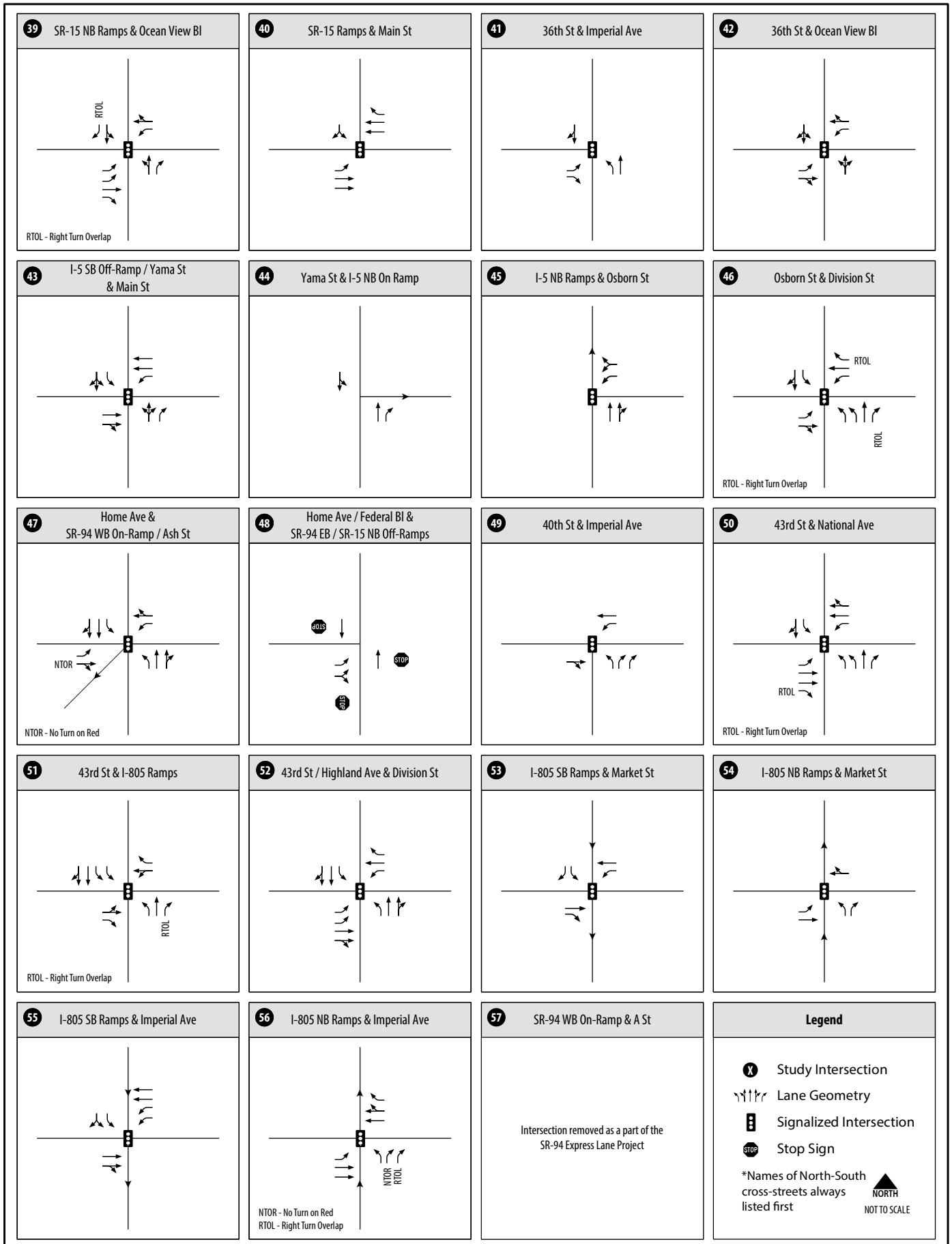
- 
- 28th Street & National Avenue – widen the SB approach to include an exclusive left-turn lane;
  - I-5 SB On-Ramp / Boston Avenue - Signalize intersection and restripe the EB approach to include an exclusive left-turn lane;
  - Broadway / SR-94 WB Ramps – Signalize intersection;
  - I-5 NB Ramps / Osborn Street - Signalize intersection and restripe roadway to include the following geometries:
    - WB approach: exclusive left-turn lane and shared right/left-turn lane; and
    - EB approach: exclusive left-turn lane and shared right/left-turn lane.
  - Osborn Street / Division Street - Signalize intersection and widen roadway to include the following geometries:
    - NB approach: Dual left-turn lanes, single through-lane, and an exclusive right-turn lane with overlap phase;
    - SB approach: Exclusive left-turn lane, shared through/right-lane; and
    - WB approach: Exclusive left-turn lane, single through lane, exclusive right-turn lane with overlap phase.
  - I-805 SB Ramps & Market Street - Restripe EB approach to include an exclusive right-turn lane;
  - I-805 SB Off-Ramp / Imperial Avenue – widen the SB off-ramp to provide dual left-turn lanes and an exclusive right-turn lane;
  - Euclid Avenue / SR-94 WB – Signalize intersection and widen the NB approach to include an exclusive right-turn lane;
  - Euclid Avenue / SR-94 EB – Signalize intersection and widen roadway to include the following geometries:
    - WB approach: dual left-turn lanes, dual right-turn lanes; and
    - SB approach: exclusive left-turn lane, dual SB through lanes.
  - Euclid Avenue / Market Street – construction of an exclusive SB right-turn lane;
  - Bayview Heights Way / SR-94 WB Ramps – Signalize intersection;
  - Kelton Road / SR-94 EB Ramps – Signalize intersection; and
  - Division Street / Plaza Boulevard – Signalize intersection.

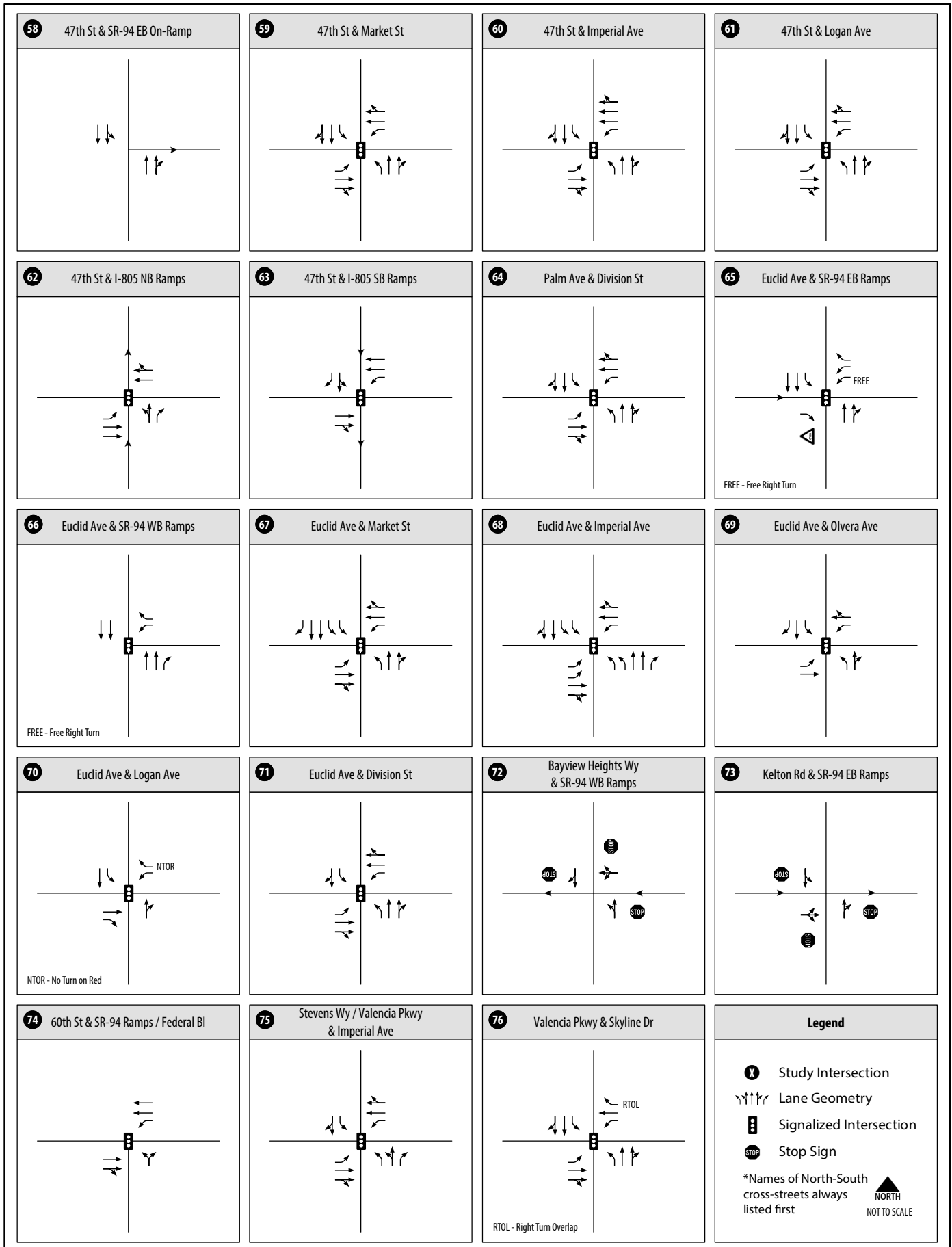
The proposed intersection geometrics and forecasted AM/PM peak hour turning movement volumes under buildout of the Preferred Plan are provided in **Figure 4-4** and **Figure 4-5**, respectively.

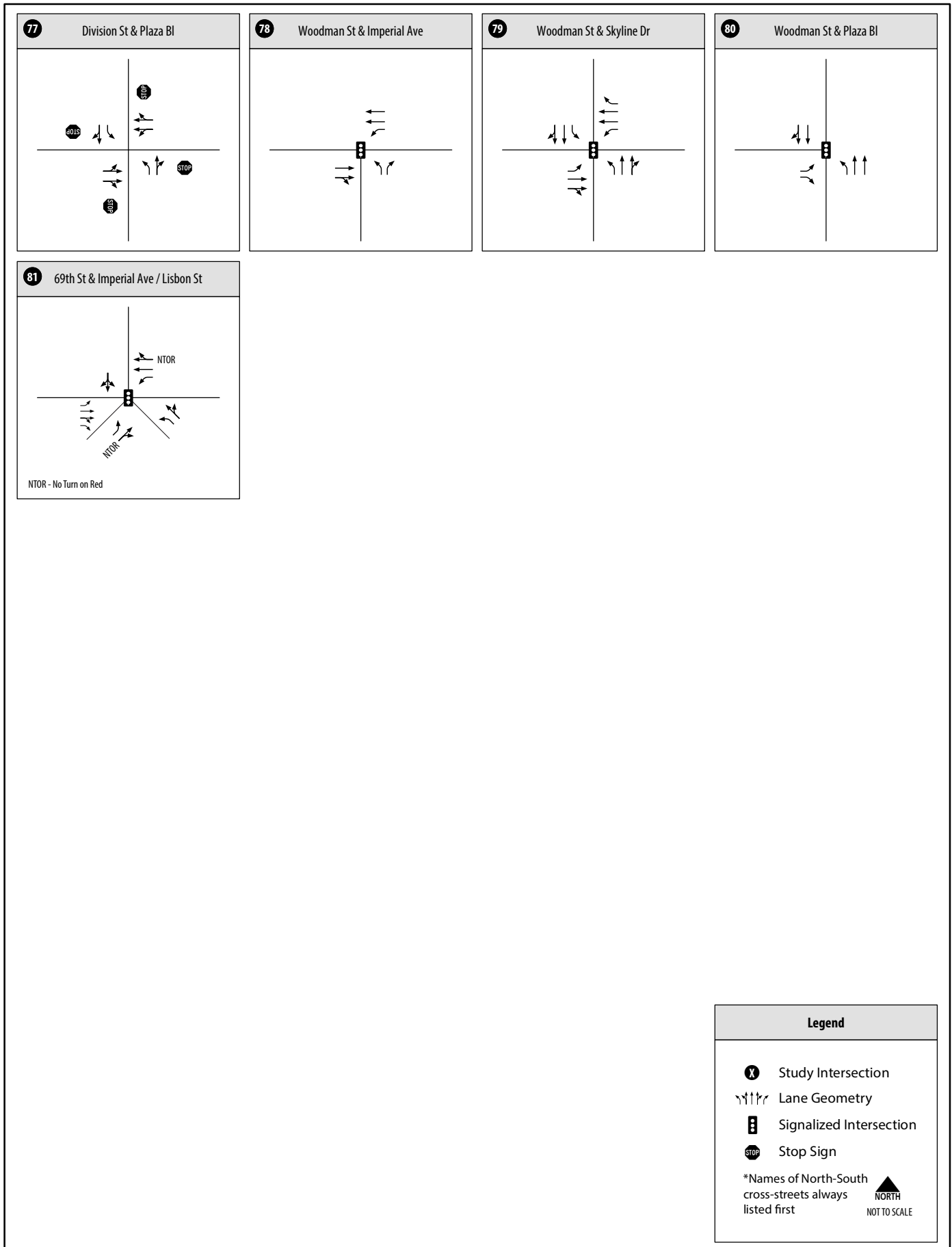
**Table 4-6** displays intersection level of service and average vehicle delay results for the study area intersections under both the Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in **Appendix L**.

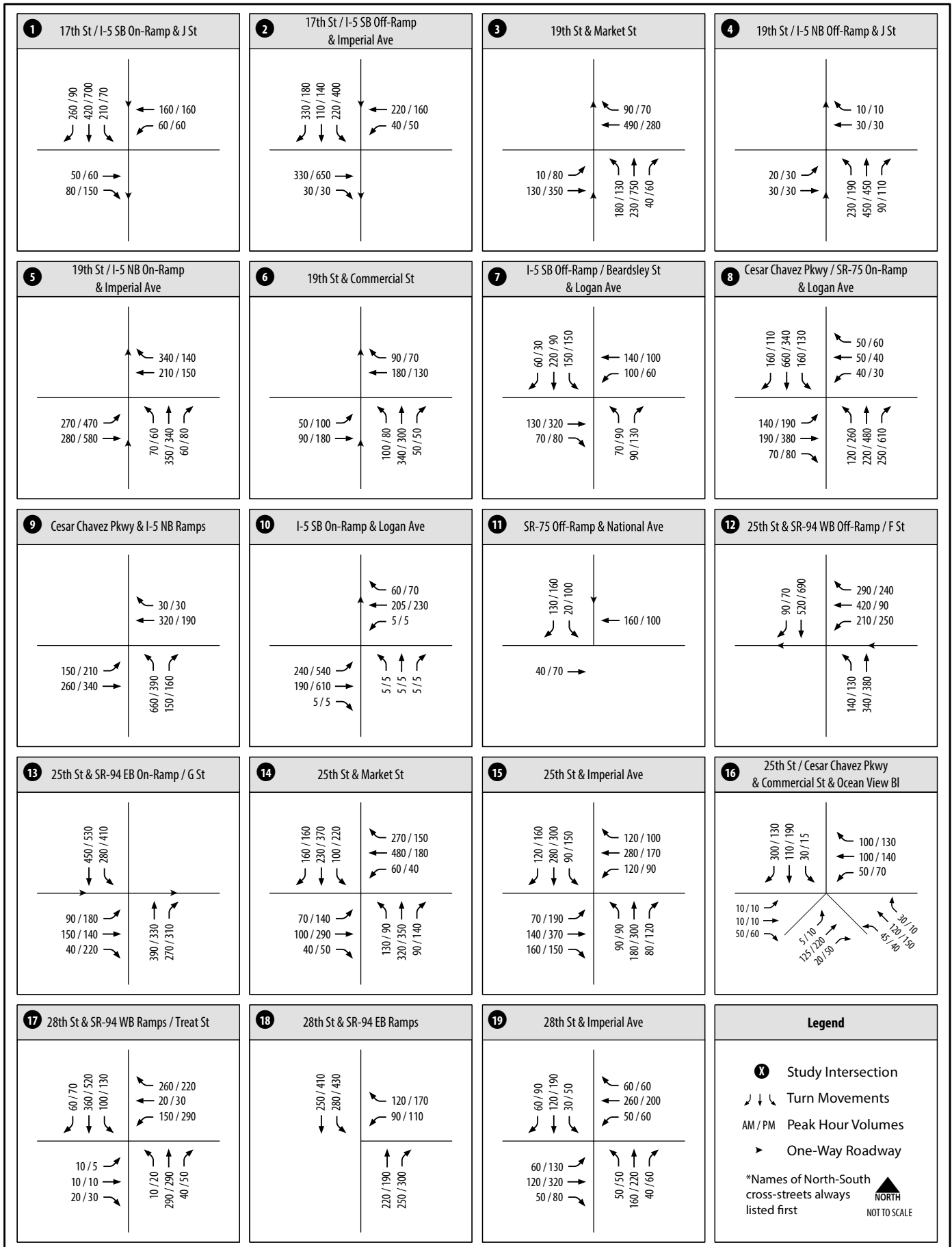




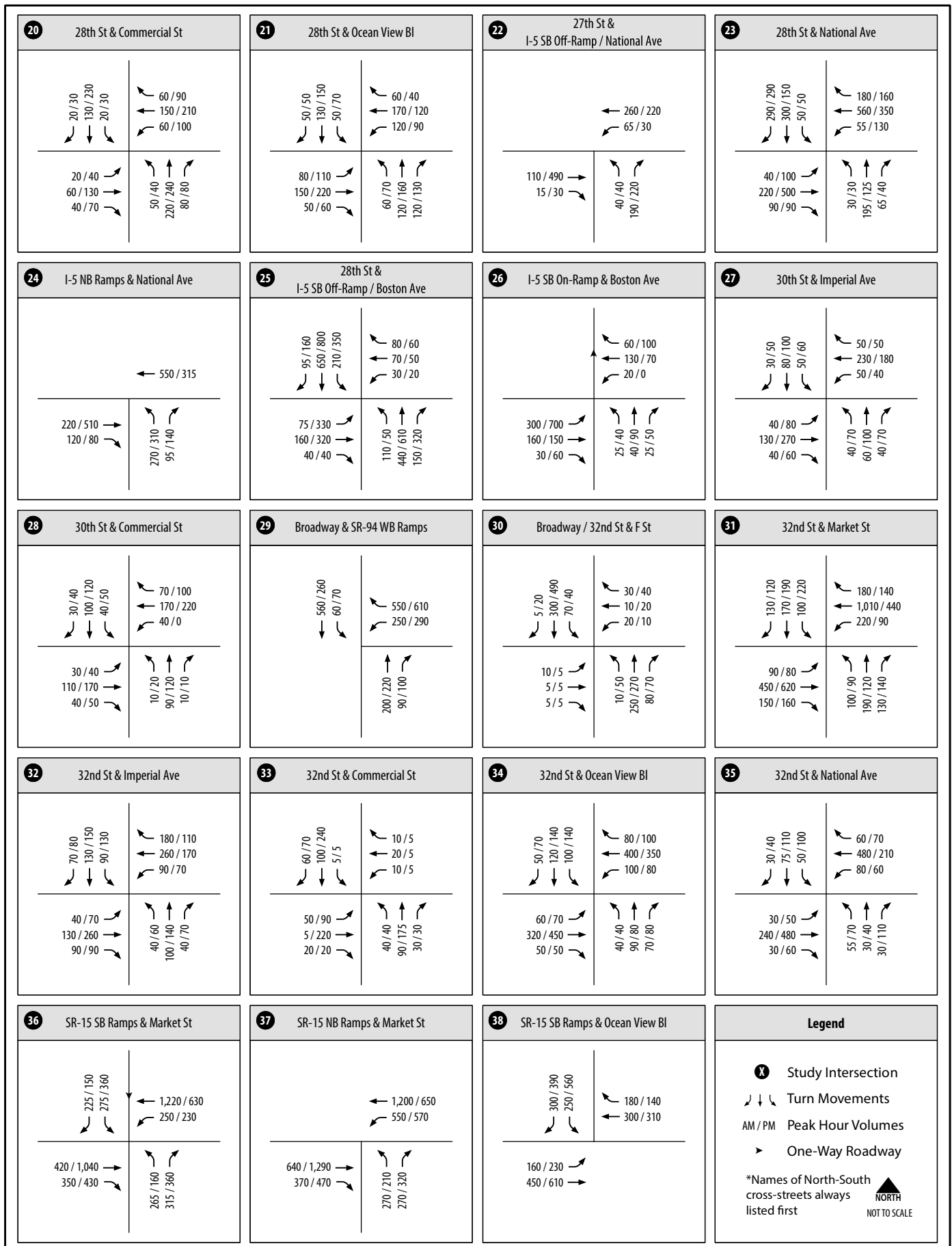


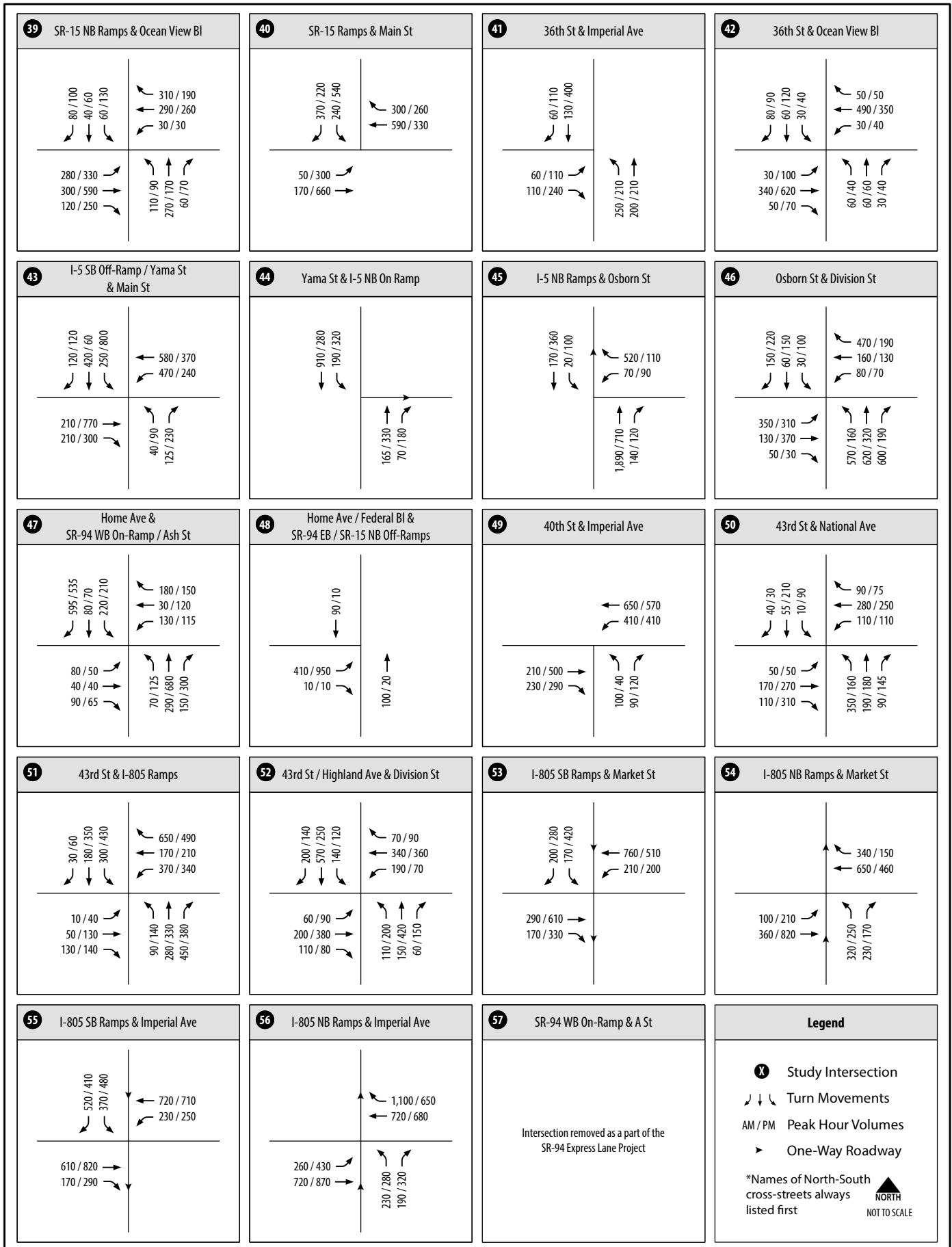


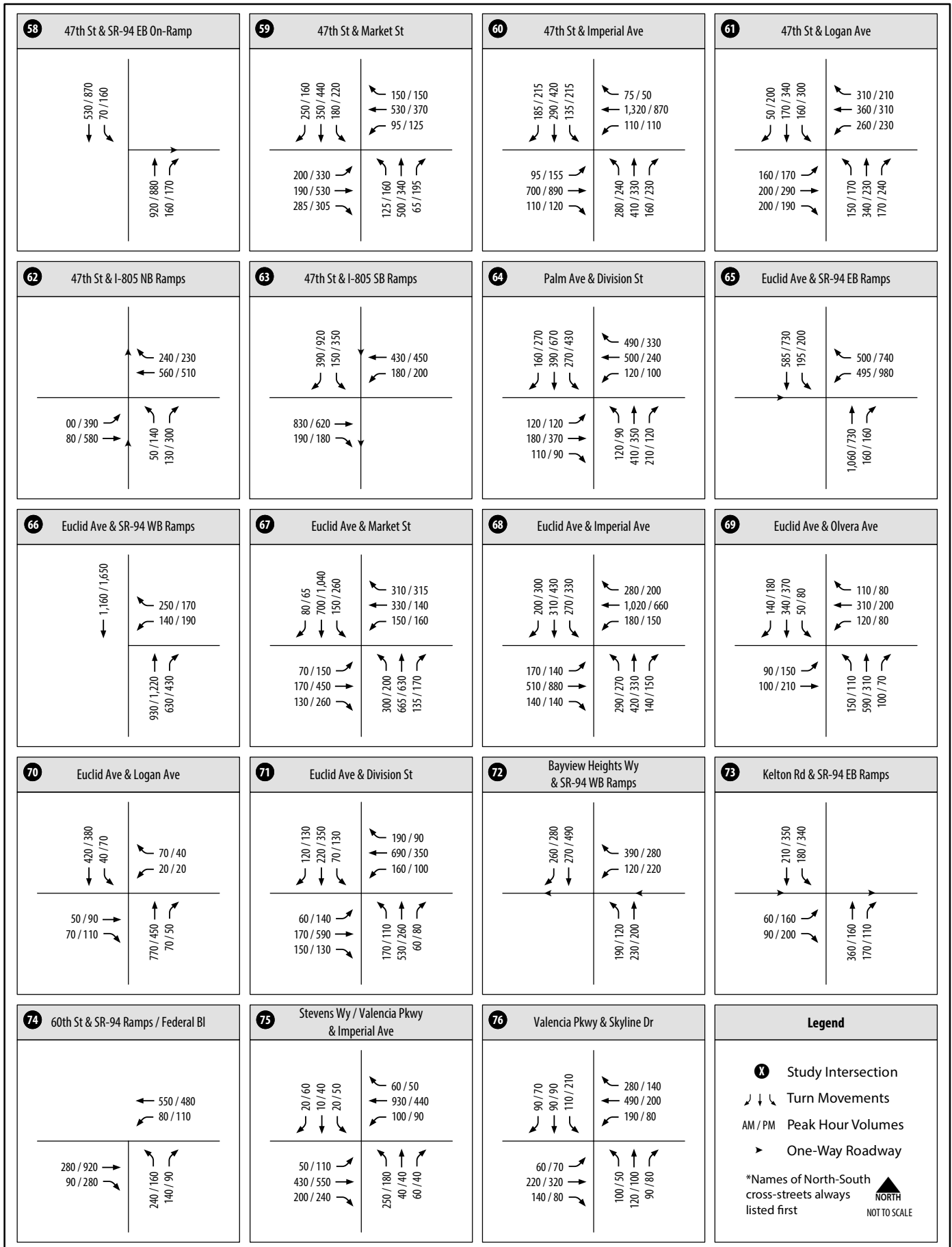


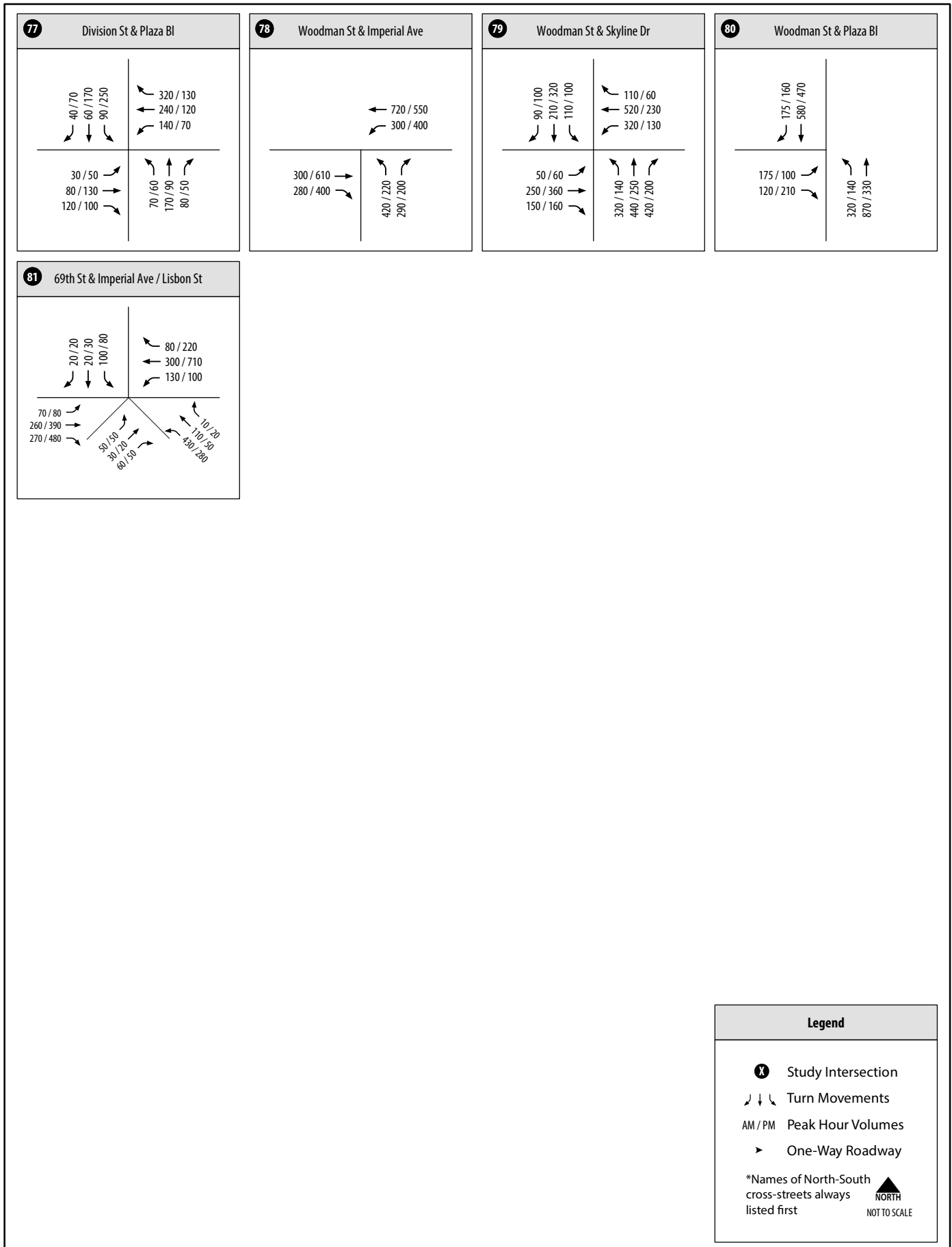












**Table 4-6  
Peak Hour Intersection Level of Service Results  
Preferred Plan vs. Existing Conditions**

Intersection	Control (Preferred Plan)	AM Peak Hour		PM Peak Hour		Existing Delay (sec.) AM/PM	Existing LOS AM/PM	Change in Delay (sec.)	Community	SI?
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
1. 17th Street/I-5 SB On-Ramp / J Street	Signal	11.7	B	8.3	A	7.5 / 7.2	A / A	4.2 / 1.1	Downtown	No
2. 17th Street/I-5 SB Off-Ramp / Imperial Avenue	Signal	18.8	B	16.0	B	16.5 / 14	B / B	2.3 / 2.0	Downtown	No
3. 19th Street / Market Street	Signal	8.7	A	20.7	C	8.3 / 19.9	A / B	0.4 / 0.8	Southeastern	No
4. 19th Street/I-5 NB Off-Ramp / J Street	AWSC	14.8	B	19.6	C	8.4 / 13.4	A / B	6.4 / 6.2	Southeastern	No
5. 19th Street/I-5 NB On-Ramp / Imperial Avenue	Signal	14.2	B	14.7	B	13.1 / 12.2	B / B	1.1 / 2.5	Southeastern	No
6. 19th Street / Commercial Street	Signal	7.8	A	26.6	C	5.0 / 24.3	A / C	2.8 / 2.3	Southeastern	No
7. I-5 SB Off-Ramp/Beardsley Street / Logan Avenue	AWSC	21.2	C	38.1	E	10.3 / 12.9	B / B	10.9 / 25.2	Barrio Logan	Yes
8. Cesar Chavez Parkway/SR-75 On-Ramp / Logan Avenue	Signal	22.7	C	42.1	D	20.9 / 32.4	C / C	1.8 / 9.7	Barrio Logan	No
9. Cesar Chavez Parkway / I-5 NB Ramps	Signal	25.1	C	21.4	C	22.6 / 19.9	C / B	2.5 / 1.5	Southeastern	No
10. I-5 SB On-Ramp / Logan Avenue	OWSC	9.8	A	14.4	B	8.3 / 49.4	A / E	1.5 / -35.0	Barrio Logan	No
11. SR-75 Off-Ramp / National Avenue	OWSC	10.9	B	10.6	B	10.1 / 10.2	B / B	0.8 / 0.4	Barrio Logan	No
12. 25th Street / SR-94 WB Off-Ramp/F Street	Signal	12.3	B	8.9	A	22.4 / 20.7	C / C	-10.1 / -11.8	Golden Hill	No
13. 25th Street / SR-94 EB On-Ramp/G Street	Signal	9.7	A	18.3	B	11.0 / 19.3	B / C	-1.3 / -1.0	Southeastern	No
14. 25th Street / Market Street	Signal	45.5	D	36.9	D	21.4 / 28.4	C / C	24.1 / 8.5	Southeastern	No
15. 25th Street / Imperial Avenue	Signal	16.7	B	20.5	C	12.7 / 12.8	B / B	4.0 / 7.7	Southeastern	No
16. 25th Street/Cesar Chavez Parkway/Ocean View Boulevard / Commercial Street	Signal	29.8	C	25.4	C	24.4 / 26.1	C / C	5.4 / -0.7	Southeastern	No

**Table 4-6  
Peak Hour Intersection Level of Service Results  
Preferred Plan vs. Existing Conditions**

Intersection	Control (Preferred Plan)	AM Peak Hour		PM Peak Hour		Existing Delay (sec.) AM/PM	Existing LOS AM/PM	Change in Delay (sec.)	Community	SI?
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
17. 28th Street / SR-94 WB Ramps/Treat Street	Signal	19.6	B	27.5	C	16.7 / 423.1	C / F	2.9 / -395.6	Golden Hill	No
18. 28th Street / SR-94 EB Ramps	Signal	22.8	C	35.0	C	38.5 / 123.3	E / F	-15.7 / -88.3	Southeastern	No
19. 28th Street / Imperial Avenue	Signal	18.5	B	19.5	B	16.4 / 18.5	B / B	2.1 / 1.0	Southeastern	No
20. 28th Street / Commercial Street	Signal	10.3	B	17.9	B	5.9 / 7.3	A / A	4.4 / 10.6	Southeastern	No
21. 28th Street / Ocean View Boulevard	Signal	24.9	C	21.4	C	14.0 / 13.7	B / B	10.9 / 7.7	Southeastern	No
22. 27th Street/I-5 SB Off-Ramp / National Avenue	OWSC	10.8	B	14.8	B	12.0 / 16.1	B / C	-1.2 / -1.3	Barrio Logan	No
23. 28th Street / National Avenue	Signal	57.7	E	37.5	D	34.9 / 19.6	C / B	22.8 / 17.9	Southeastern	Yes
24. I-5 NB Ramps / National Avenue	Signal	32.9	C	34.1	C	29.1 / 30.7	C / C	3.8 / 3.4	Southeastern	No
25. 28th Street/I-5 SB Off-Ramp / Boston Avenue	Signal	16.5	B	39.0	D	10.1 / 15.7	B / B	6.4 / 23.3	Barrio Logan	No
26. I-5 SB On-Ramp / Boston Avenue	Signal	21.8	C	22.4	C	18.5 / 192.8	C / F	3.3 / -170.4	Barrio Logan	No
27. 30th Street / Imperial Avenue	Signal	13.4	B	14.3	B	12.1 / 10.0	B / A	1.3 / 4.3	Southeastern	No
28. 30th Street / Commercial Street	Signal	9.3	A	10.2	B	9.6 / 9.4	A / A	-0.3 / 0.8	Southeastern	No
29. Broadway / SR-94 WB Ramps	Signal	16.9	B	11.1	B	43.6 / 78.9	E / F	-26.7 / -67.8	Golden Hill	No
30. Broadway/32nd Street / F Street	TWSC	19.1	C	31.0	D	15.7 / 15.6	C / C	3.4 / 15.4	Southeastern	No
31. 32nd Street / Market Street	Signal	18.1	B	37.5	D	11.0 / 15.2	B / B	7.1 / 22.3	Southeastern	No
32. 32nd Street / Imperial Avenue	Signal	27.4	C	28.5	C	15.6 / 16.9	B / B	11.8 / 11.6	Southeastern	No
33. 32nd Street / Commercial Street	Signal	8.6	A	17.1	B	5.8 / 7.8	A / A	2.8 / 9.3	Southeastern	No
34. 32nd Street / Ocean View Boulevard	Signal	31.3	C	30.4	C	17.2 / 17.2	B / B	14.1 / 13.2	Southeastern	No
35. 32nd Street / National Boulevard	Signal	8.2	A	10.9	B	6.7 / 7.8	A / A	1.5 / 3.1	Southeastern	No
36. I-15 SB Ramps / Market Street	Signal	36.8	D	51.3	D	14.2 / 25.1	B / C	22.6 / 26.2	Southeastern	No

**Table 4-6  
Peak Hour Intersection Level of Service Results  
Preferred Plan vs. Existing Conditions**

Intersection	Control (Preferred Plan)	AM Peak Hour		PM Peak Hour		Existing Delay (sec.) AM/PM	Existing LOS AM/PM	Change in Delay (sec.)	Community	SI?
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
37. I-15 NB Ramps / Market Street	Signal	39.0	D	46.4	D	21.2 / 39	C / D	17.8 / 7.4	Southeastern	No
38. I-15 SB Ramps / Ocean View Boulevard	Signal	13.3	B	23.0	C	11.7 / 16.6	B / B	1.6 / 6.4	Southeastern	No
39. I-15 NB Ramps / Ocean View Boulevard	Signal	75.4	E	42.5	D	60.2 / 31.7	E / C	15.2 / 10.8	Southeastern	Yes
40. I-15 Ramps / Main Street	Signal	34.0	C	70.1	E	21.0 / 36.9	C / D	13.0 / 33.2	Barrio Logan	Yes
41. 36th Street / Imperial Avenue	Signal	18.2	B	16.8	B	13.0 / 13.3	B / B	5.2 / 3.5	Southeastern	No
42. 36th Street / Ocean View Boulevard	Signal	15.1	B	18.0	B	12.7 / 14.6	B / B	2.4 / 3.4	Southeastern	No
43. I-5 SB Off-Ramp/Yama Street / Main Street	Signal	34.8	C	104.0	F	22.8 / 39.6	C / D	12.0 / 64.4	Barrio Logan	Yes
44. Yama Street / I-5 SB On-Ramp	OWSC	5.0	A	11.3	A	3.0 / 10.7	A / B	2.0 / 0.6	Barrio Logan	No
45. I-5 NB Ramps / Osborn Street	Signal	42.7	D	6.7	A	630.9 / 51.1	F / F	-588.2 / -44.4	Southeastern	No
46. Osborn Street / Division Street	Signal	53.3	D	30.3	C	94.0 / 25.6	F / D	-40.7 / 4.7	Southeastern/City of National City	No
47. Home Avenue / SR-94 WB On-Ramp / Ash Street/Federal Boulevard	Signal	28.8	C	44.6	D	21.1 / 20.8	C / C	7.7 / 23.8	Mid-City	No
48. Home Avenue/Federal Boulevard / SR-94 EB Off-Ramp/I-15 NB Off-Ramp	AWSC	11.5	B	33.0	D	9.3 / 23.9	A / C	2.2 / 9.1	Southeastern	No
49. 40th Street / Imperial Avenue	Signal	45.4	D	75.0	E	16.3 / 21.8	B / C	29.1 / 53.2	Southeastern	Yes
50. 43rd Street / National Avenue	Signal	45.7	D	21.9	C	21.4 / 20.3	C / C	24.3 / 1.6	Southeastern	No
51. 43rd Street / I-805 Ramps	Signal	42.6	D	52.4	D	27.0 / 36.1	C / D	15.6 / 16.3	Southeastern	No
52. 43rd Street/Highland Avenue / Division Street	Signal	31.6	C	42.0	D	28.7 / 21.8	C / C	2.9 / 20.2	Southeastern	No
53. Market Street / I-805 SB Ramps	Signal	13.3	B	26.2	C	17.2 / 26.1	B / C	-3.9 / 0.1	Southeastern	No

**Table 4-6  
Peak Hour Intersection Level of Service Results  
Preferred Plan vs. Existing Conditions**

Intersection	Control (Preferred Plan)	AM Peak Hour		PM Peak Hour		Existing Delay (sec.) AM/PM	Existing LOS AM/PM	Change in Delay (sec.)	Community	SI?
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
54. Market Street / I-805 NB Ramps	Signal	45.9	D	42.4	D	14.4 / 10.4	B / B	31.5 / 32.0	Encanto	No
55. Imperial Avenue / I-805 SB Ramps	Signal	27.3	C	24.5	C	20.4 / 24	C / C	14.2 / 9.2	Southeastern	No
56. Imperial Avenue / I-805 NB Ramps	Signal	23.8	C	34.4	C	12.8 / 16.8	B / B	11.0 / 17.6	Encanto	No
57. SR-94 WB On-Ramp / A Street	Intersection Removed					10.5 / 10.3	B / B	-10.5 / -10.3		No
58. 47th Street / SR-94 EB On-Ramp	OWSC	2.1	A	3.3	A	3.8 / 5.3	A / A	-1.7 / -2.0	Encanto	No
59. 47th Street / Market Street	Signal	37.8	D	43.9	D	29.1 / 26.5	C / C	8.7 / 17.4	Encanto	No
60. 47th Street / Imperial Avenue	Signal	54.7	D	49.6	D	34.2 / 38.9	C / D	20.5 / 10.7	Encanto	No
61. 47th Street / Logan Avenue	Signal	34.2	C	39.1	D	25.1 / 26.1	C / C	9.1 / 13.0	Encanto	No
62. 47th Street / I-805 NB Ramps	Signal	24.4	C	14.4	B	12.8 / 8.1	B / A	11.6 / 6.3	Encanto	No
63. 47th Street / I-805 SB Ramps	Signal	17.3	B	67.1	E	14.3 / 26.0	B / C	3.0 / 41.1	Encanto	Yes
64. Palm Avenue / Division Street	Signal	52.7	D	37.8	D	33.3 / 28.3	C / C	19.4 / 9.5	City of National City	No
65. Euclid Avenue / SR-94 EB Ramps	Signal	19.4	B	16.4	B	46.8 / 177.4	E / F	-27.4 / -161.0	Encanto	No
66. Euclid Avenue / SR-94 WB Ramps	Signal	6.8	A	7.9	A	88.7 / 295.4	F / F	-81.9 / -287.5	Mid-City	No
67. Euclid Avenue / Market Street	Signal	34.4	C	54.3	D	27.5 / 30.5	C / C	6.9 / 23.8	Encanto	No
68. Euclid Avenue / Imperial Avenue	Signal	45.9	D	56.9	E	36.7 / 36.9	D / D	9.2 / 20.0	Encanto	Yes
69. Euclid Avenue / Olvera Avenue	Signal	74.9	E	56.1	E	43.8 / 47.7	D / D	31.1 / 8.4	Encanto	Yes
70. Euclid Avenue / Logan Avenue	Signal	14.9	B	23.9	C	14.6 / 20.5	B / C	0.3 / 3.4	Encanto	No
71. Euclid Avenue / Division Street	Signal	36.3	D	38.1	D	27.7 / 23.1	C / C	8.6 / 15.0	City of National City	No
72. Bayview Heights Way / SR-94 WB Ramps	Signal	28.6	C	47.1	D	22.3 / 24.2	C / C	6.3 / 22.9	Mid-City	No
73. Kelton Road / SR-94 EB Ramps	Signal	10.4	B	36.8	D	13.9 / 24.8	B / C	-3.5 / 12.0	Encanto	No



**Table 4-6  
Peak Hour Intersection Level of Service Results  
Preferred Plan vs. Existing Conditions**

Intersection	Control (Preferred Plan)	AM Peak Hour		PM Peak Hour		Existing Delay (sec.) AM/PM	Existing LOS AM/PM	Change in Delay (sec.)	Community	SI?
		Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS					
74. 60th Street / SR-94 Ramps/Federal Boulevard	Signal	13.8	B	16.5	B	10.7 / 11.3	B / B	3.1 / 5.2	Encanto	No
75. Valencia Parkway / Imperial Avenue	Signal	35.2	D	35.3	D	26.0 / 29.9	C / C	9.2 / 5.4	Encanto	No
76. Valencia Parkway / Skyline Drive	Signal	49.8	D	25.7	C	23.2 / 25.1	C / C	26.6 / 0.6	Encanto	No
77. Division Street / Plaza Boulevard	Signal	19.2	B	15.0	B	12.2 / 9.6	B / A	7.0 / 5.4	Encanto / Skyline	No
78. Woodman Street / Imperial Avenue	Signal	26.6	C	30.4	C	14.0 / 16.9	B / B	12.6 / 13.5	Encanto / Skyline	No
79. Woodman Street / Skyline Drive	Signal	78.8	E	35.7	D	44.6 / 23.1	D / C	34.2 / 12.6	Encanto / Skyline	Yes
80. Woodman Street / Plaza Boulevard	Signal	29.2	C	13.6	B	18.3 / 12.4	B / B	10.9 / 1.2	Encanto / Skyline	No
81. 69th Street / Imperial Avenue/Lisbon Street	Signal	20.8	C	22.1	C	44.5 / 39.7	D / D	-23.7 / -17.6	Encanto / Skyline	No

Source: Chen Ryan Associates; June 2015

Notes:

Bold letter indicates unacceptable LOS E or F.

SI? = Significant Impact?

OWSC = One Way Stop Controlled

AWSC = All Way Stop Controlled

\* For one- or two-way stop controlled intersections, the delay shown is the worst delay experienced by any of the approaches.

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As shown in Table 4-6, ten (10) study area intersections are currently operating at LOS E or F during the AM and/PM peak hour, including four (4) intersections located within Southeastern San Diego, three (3) within Encanto Neighborhoods, and three (3) within the sphere of influence area. They are as follows:

*Southeastern San Diego*

- 23. 28th Street / National Avenue – (AM: LOS E);
- 38. I-15 NB Ramps / Ocean View Boulevard (AM: LOS E);
- 49. 40th Street / Imperial Avenue – (PM: LOS E); and
- 63. 47th Street / I-805 SB Ramps (PM: LOS E).

*Encanto Neighborhoods*

- 68. Euclid Avenue / Imperial Avenue (PM: LOS E);
- 69. Euclid Avenue / Olvera Avenue (AM: LOS E, PM: LOS E); and
- 79. Woodman Street / Skyline Drive (AM: LOS E).

*Sphere of Influence*

- 7. I-5 SB Off-Ramp / Beardsley Street / Logan Avenue – (PM: LOS E);
- 40. I-15 Ramps / Main Street – (PM: LOS E); and
- 43. I-5 SB Off-Ramp/Yama Street/Main Street – (PM: LOS F).

The Preferred Plan would result in ten (10) deficient intersections, compared to the current ten (10) intersections under Existing Conditions. Based on the significant impact criteria in Chapter 2, the Preferred Plan would have a significant impact to all ten (10) intersections. However, it is also important to note that LOS at nine (9) intersections, which currently operate at LOS E or F, would improve to LOS D or better due to the intersection improvements documented at the beginning of this section.

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## 4.5 Freeway/State Highway Segment Analysis

The Preferred Plan network includes freeway improvements that would directly impact the community as described in the SANDAG 2050 Regional Transportation Plan 2050. Planned freeway improvements include the following:

- I-5: operational improvement along I-5 between 17th Street and Main Street. However, this improvement is expected to be completed by the year 2050, and thus was not included in the SESD & Encanto Neighborhoods CPU model or subsequent freeway analysis.
- I-15 Manage Lane Project: includes two HOV/Express Lanes within the freeway median (one in each direction) between SR-94 and I-5. However, this improvement is expected to be completed by the year 2050, and thus was not included in the SESD & Encanto Neighborhoods CPU model or subsequent freeway analysis.
- SR-94 Express Lane Project (Alternative 1): includes two HOV/Express Lanes within the freeway median (one in each direction) between I-5 and I-805, with a direct freeway-to-freeway High Occupancy Vehicle (HOV) connector at I-805. The Express Lanes would accommodate carpools/vanpools, in addition to new Bus Rapid Transit (BRT) service. The SR-94 Express Lane Project (Alternative 1) also proposes the following modification to interchanges along the SR-94 corridors:
  - Removal of Eastbound SR-94/32nd Street On-Ramp
  - Replace On- and Off-ramps at Market Street and SR 15
  - Replacement of Left-side Freeway-to-Freeway Interchange with Standard Right-side connectors
  - Replacement of Westbound SR-94/Home Avenue On-Ramp
  - Removal of Northbound SR-15 to Westbound SR-93 Loop Connector
  - Replacement of Westbound SR-94 to Southbound SR-15 Connector
  - Removal of Westbound SR-94/49th Street/A Street On-Ramp
- I-805 South Project (Phase 1): Includes two HOV/Express Lanes within the freeway median (one in each direction) between East Palomar Street in Chula Vista and the I-805/SR-15 interchange in San Diego.

**Table 4-7** displays freeway segment LOS analysis results for the key freeway segments in the vicinity of the project study area.

**Table 4-7  
Freeway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	Preferred Plan						Existing Conditions						Change in V/C (compared to Existing)	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
I-5	17th Street & SR-94	NB	128,200	4M+2A	12,220	11,300	0.92	D	201,000	4M+2A	12,220	9,600	0.79	C	0.13	No
		SB	125,500	4M	9,400	11,000	1.17	F0		4M	9,400	9,400	1.00	E	0.17	Yes
	SR-94 & Imperial Avenue	NB	135,900	4M+1A	10,810	11,600	1.07	F0	208,000	4M+1A	10,810	11,100	1.03	F0	0.04	Yes
		SB	116,100	4M+1A	10,810	10,200	0.94	E		4M+1A	10,810	9,700	0.90	D	0.04	Yes
	Imperial Avenue & SR-75	NB	121,700	4M+1A	10,810	10,400	0.96	E	161,000	4M+1A	10,810	8,600	0.80	D	0.16	Yes
		SB	112,900	4M+1A	10,810	9,700	0.90	D		4M+1A	10,810	8,000	0.74	C	0.16	No
	SR-75 & 28th Street	NB	134,600	4M+2A	12,220	11,900	0.97	E	159,000	4M+2A	12,220	9,900	0.81	D	0.16	Yes
		SB	110,300	4M+1A	10,810	9,500	0.88	D		4M+1A	10,810	7,900	0.73	C	0.15	No
	28th Street & I-15	NB	124,500	4M	9,400	11,000	1.17	F0	155,000	4M	9,400	9,600	1.02	F0	0.15	Yes
		SB	102,000	4M	9,400	8,800	0.94	E		4M	9,400	7,700	0.82	D	0.12	Yes
I-15 & Main Street	NB	155,100	4M+2A	12,220	13,700	1.12	F0	191,000	4M+2A	12,220	11,900	0.97	E	0.15	Yes	
	SB	144,100	5M	11,750	13,200	1.12	F0		5M	11,750	11,400	0.97	E	0.15	Yes	
I-15	I-805 & SR-94	NB	75,700	3M+1A	8,460	6,300	0.74	C	109,000	3M+1A	8,460	5,500	0.65	C	0.09	No
			900	1 HOV	2,350	100	0.04	A		-	-	-	-	-	0.00	No
		SB	64,000	2M+1A	6,110	5,700	0.93	E		2M+1A	6,110	4,900	0.80	D	0.13	Yes
			500	1 HOV	2,350	0	0.00	A		-	-	-	-	-	0.00	No
	SR-94 & Market Street	NB	71,800	3M+1A	8,460	6,100	0.72	C	115,000	3M+1A	8,460	5,800	0.69	C	0.03	No
		SB	66,600	3M+1A	8,460	6,800	0.80	D		3M+1A	8,460	6,500	0.77	C	0.03	No

**Table 4-7  
Freeway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	Preferred Plan						Existing Conditions						Change in V/C (compared to Existing)	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
I-15	Market Street & Ocean View Boulevard	NB	79,100	3M	7,050	6,700	0.95	E	107,000	3M	7,050	5,600	0.79	C	0.16	Yes
		SB	71,300	3M	7,050	7,200	1.02	F0		3M	7,050	6,000	0.85	D	0.17	Yes
	Ocean View Boulevard & I-5	NB	74,700	3M+1A	8,460	5,500	0.65	C	48,000	3M+1A	8,460	2,200	0.26	A	0.39	No
		SB	67,300	4M+1A	10,810	5,500	0.51	B		4M+1A	10,810	2,200	0.20	A	0.31	No
	I-5 & Norman Scott Road	NB	18,600	2M	4,700	1,400	0.30	A	16,500	2M	4,700	700	0.15	A	0.15	No
		SB	16,500	2M	4,700	1,300	0.28	A		2M	4,700	700	0.15	A	0.13	No
I-805	Home Avenue & SR-94	NB	124,700	4M	9,400	9,200	0.98	E	217,000	4M	9,400	10,400	1.11	F0	-0.13	No
			29,000	1 HOV	2,350	2,100	0.89	D		-	-	-	-	-	0.00	No
		SB	112,500	4M	9,400	9,200	0.98	E		4M	9,400	10,400	1.11	F0	-0.13	No
			22,600	1 HOV	2,350	1,900	0.81	D		-	-	-	-	-	0.00	No
	SR-94 & Market Street	NB	121,500	4M	9,400	8,900	0.95	E	216,000	4M	9,400	10,200	1.09	F0	-0.14	No
			27,400	1 HOV	2,350	2,000	0.85	D		-	-	-	-	-	0.00	No
		SB	110,000	4M	9,400	9,000	0.96	E		4M	9,400	10,400	1.11	F0	-0.15	No
			22,800	1 HOV	2,350	1,900	0.81	D		-	-	-	-	-	0.00	No
	Market Street & Imperial Avenue	NB	156,800	4M+2A	12,220	11,500	0.94	E	227,000	4M+2A	12,220	10,800	0.88	D	0.06	Yes
			29,400	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	Yes
		SB	142,000	4M+2A	12,220	11,700	0.96	E		4M+2A	12,220	10,900	0.89	D	0.07	Yes
			28,500	1 HOV	2,350	2,300	0.98	E		-	-	-	-	-	0.00	Yes

**Table 4-7  
Freeway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	Preferred Plan						Existing Conditions						Change in V/C (compared to Existing)	SI?	
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS			
I-805	Imperial Avenue & 43rd Street	NB	150,500	5M	11,750	11,000	0.94	E	210,000	5M	11,750	9,900	0.84	D	0.10	Yes	
			29,100	1 HOV	2,350	2,100	0.89	D		-	-	-	-	-	0.00	No	
		SB	141,200	4M+1A	10,810	11,100	1.03	F0		4M+1A	10,810	10,100	0.93	E	0.10	Yes	
			28,200	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	Yes	
	43rd Street & Plaza Boulevard	NB	159,500	4M+2A	12,220	10,100	0.83	D		196,000	4M+2A	12,220	8,900	0.73	C	0.10	No
			28,100	1 HOV	2,350	1,800	0.77	C			-	-	-	-	-	0.00	No
		SB	131,700	5M	11,750	10,500	0.89	D			5M	11,750	9,300	0.79	C	0.10	No
			23,500	1 HOV	2,350	1,900	0.81	D			-	-	-	-	-	0.00	No
SR-94	17th Street & 25th Street	EB	94,400	4M	9,400	9,300	0.99	E	110,000		4M	9,400	7,500	0.80	D	0.19	Yes
		WB	105,400	3M+1A	8,460	8,400	0.99	E			3M+1A	8,460	6,900	0.82	D	0.17	Yes
			3,300	1 HOV	2,350	300	0.13	A			-	-	-	-	-	0.00	No
	25th Street & 28th Street	EB	100,300	4M	9,400	9,900	1.05	F0	124,000		4M	9,400	8,300	0.88	D	0.17	Yes
			6,200	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No	
		WB	109,200	4M	9,400	8,700	0.93	E		4M	9,400	7,400	0.79	C	0.14	Yes	
			3,300	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No	
	28th Street & 30th Street	EB	112,200	4M	9,400	10,200	1.09	F0	132,000	4M	9,400	8,100	0.86	D	0.23	Yes	
			7,100	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No	
		WB	123,300	4M	9,400	9,900	1.05	F0		4M	9,400	7,900	0.84	D	0.21	Yes	
			3,200	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No	

**Table 4-7  
Freeway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	Preferred Plan						Existing Conditions						Change in V/C (compared to Existing)	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
SR-94	30th Street & I-15	EB	115,900	4M+1A	10,810	10,500	0.97	E	146,000	4M+1A	10,810	9,000	0.83	D	0.14	Yes
			7,100	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
		WB	127,400	4M+1A	10,810	10,200	0.94	E		4M+1A	10,810	8,700	0.80	D	0.14	Yes
			3,200	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
	I-15 & Home Avenue	EB	99,500	4M+1A	10,810	9,100	0.84	D	140,000	4M+1A	10,810	8,600	0.80	D	0.04	No
			5,600	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	109,400	4M	9,400	8,800	0.94	E		4M	9,400	8,300	0.88	D	0.06	Yes
			2,100	1 HOV	2,350	200	0.09	A		-	-	-	-	-	0.00	No
	Home Avenue & I-805	EB	101,300	4M+1A	10,810	9,200	0.85	D	128,000	4M+1A	10,810	7,900	0.73	C	0.12	No
			5,900	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	111,300	4M	9,400	8,900	0.95	E		4M	9,400	7,600	0.81	D	0.14	Yes
			2,100	1 HOV	2,350	200	0.09	A		-	-	-	-	-	0.00	No
	I-805 & 47th Street	EB	146,000	5M	11,750	13,300	1.13	F0	172,000	5M	11,750	10,600	0.90	D	0.23	Yes
		WB	160,400	4M+1A	10,810	12,800	1.18	F0		4M+1A	10,810	10,200	0.94	E	0.24	Yes
	47th Street & Euclid Avenue	EB	140,000	5M+1A	13,160	12,700	0.97	E	171,000	5M+1A	13,160	10,500	0.80	D	0.17	Yes
			5,300	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	153,800	4M+1A	10,810	12,300	1.14	F0		4M+1A	10,810	10,200	0.94	E	0.20	Yes
			7,600	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No

**Table 4-7  
Freeway Segment Level of Service Results  
Preferred Plan vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	Preferred Plan						Existing Conditions						Change in V/C (compared to Existing)	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
SR-94	Euclid Avenue & Kelton Road	EB	131,600	5M	11,750	12,000	1.02	<b>F0</b>	156,000	5M	11,750	9,600	0.82	D	0.20	Yes
			5,100	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	136,100	4M+1A	10,810	10,500	0.97	<b>E</b>		4M+1A	10,810	8,400	0.78	C	0.19	Yes
			6,500	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
	Kelton Road & Federal Boulevard	EB	128,300	4M+1A	10,810	11,600	1.07	<b>F0</b>	161,000	4M+1A	10,810	9,300	0.86	D	0.21	Yes
			3,700	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	140,100	4M+1A	10,810	10,800	1.00	<b>E</b>		4M+1A	10,810	8,700	0.80	D	0.20	Yes
			6,000	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
	Federal Boulevard & College Grove Way	EB	110,600	4M	9,400	10,000	1.06	<b>F0</b>	145,000	4M	9,400	8,400	0.89	D	0.17	Yes
			3,800	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	120,800	4M	9,400	9,300	0.99	<b>E</b>		4M	9,400	7,800	0.83	D	0.16	Yes
			6,500	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
	College Grove Way & College Avenue	EB	113,400	4M	9,400	10,200	1.09	<b>F0</b>	145,000	4M	9,400	8,400	0.89	D	0.20	Yes
			3,800	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	124,500	4M	9,400	10,300	1.10	<b>F0</b>		4M	9,400	8,400	0.89	D	0.21	Yes
			5,500	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No

Source: Chen Ryan Associates; June 2015

Notes:  
 SI = Significant Impact  
 Bold letter indicates unacceptable LOS E or F.  
 M = Mainline. A = Auxiliary Lane. HOV = High Occupancy Vehicle Only



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### Preferred Plan

In conclusion, under buildout of the Preferred Plan, the following twenty-four (24) freeway segments within the project study area are anticipated to operate at less than desirable LOS E or F:

- I-5, between 17th Street and SR-94 – (SB: LOS F);
- I-5, between SR-94 and Imperial Avenue – (NB: LOS F / SB: LOS E);
- I-5, between Imperial Avenue and SR-75 – (NB: LOS E);
- I-5, between SR-75 and 28th Street – (NB: LOS E);
- I-5, between 28th Street and I-15 – (NB: LOS F / SB: LOS E);
- I-5, between I-15 and Main Street – (NB: LOS F / SB: LOS F);
- I-15, between I-805 and SR-94 – (SB: LOS E);
- I-15, between Market Street and Ocean View Boulevard – (NB: LOS E / SB: LOS F);
- I-805, between Home Avenue and SR-94 – (NB: LOS E / SB: LOS E);
- I-805, between SR-94 and Market Street – (NB: LOS E / SB: LOS E);
- I-805, between Market Street and Imperial Avenue – (NB: LOS E / SB: LOS E);
- I-805, between Imperial Avenue and 43rd Street – (NB: LOS E / SB: LOS F);
- SR-94, between 17th Street and 25th Street – (EB: LOS E / WB: LOS E);
- SR-94, between 25th Street and 28th Street – (EB: LOS F / WB: LOS E);
- SR-94, between 28th Street and 30th Street – (EB: LOS F / WB: LOS F);
- SR-94, between 30th Street and I-15 – (EB: LOS E / WB: LOS E);
- SR-94, between I-15 and Home Avenue – (WB: LOS E);
- SR-94, between Home Avenue and I-805 – (WB: LOS E);
- SR-94, between I-805 and 47th Street – (EB: LOS F / WB: LOS E);
- SR-94, between 47th Street and Euclid Avenue (EB: LOS E / WB: LOS F);
- SR-94, between Euclid Avenue and Kelton Road (EB: LOS F / WB: LOS E);
- SR-94, between Kelton Road and Federal Boulevard – (EB: LOS F / WB: LOS E);
- SR-94, between Federal Boulevard and College Grove Way – (EB: LOS F / WB: LOS E);
- and
- SR-94, between College Grove Way and College Avenue – (EB: LOS F / WB: LOS F).

Based on the criteria documented in Chapter 2, the Preferred Plan would have a significant impact to all freeway segments listed above with the following exceptions:

- I-805, between Home Avenue and SR-94; and
- I-805, between SR-94 and Market Street.

The impact is not significant at the two freeway segments listed above because the Preferred Plan LOS is better than the Existing LOS.

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## 4.6 Ramp Metering Analysis

**Table 4-8** summarizes the freeway ramp metering analysis results under both Existing Conditions and the Preferred Plan scenarios. As shown, the peak hour demand under Existing Conditions is below the metering rate, therefore On-Ramp queuing issues due to ramp metering do not currently exist under the AM or PM peak period at any of the studied ramps under Existing Conditions. Additionally, the projected Preferred Plan peak hour demand is not anticipated to exceed the meter rate at any of the study ramp meter locations. Therefore, no freeway On-Ramp queuing issues are anticipated under buildout of the Preferred Plan.

**Table 4-8  
Ramp Metering Analysis  
Preferred Plan vs. Existing Conditions**

Location	Peak Hour	# of Lanes		Preferred Plan					Existing Conditions				Community	SI?
		SOV	HOV	D <sub>vol</sub> - Demand <sup>1</sup> (veh/hr per lane)	Meter Rate <sup>2</sup> (veh/hr per lane)	Excess Demand <sup>3</sup> (veh/hr per lane)	Delay <sup>4</sup> (min)	Queue <sup>5</sup> (ft)	D <sub>vol</sub> - Demand <sup>1</sup> (veh/hr per lane)	Excess Demand (veh/hr per lane)	Delay (min)	Queue (ft)		
SR-94 EB On-Ramp @ 25th Street	PM	2	0	840	868	0	0	0	738	0	0	0	Southeastern	No
SR-94 EB On-Ramp @ 28th Street	PM	1	0	730	868	0	0	0	646	0	0	0	Southeastern	No
SR-94 EB On-Ramp @ 32nd Street	PM	1	0	0	0	0	0	0	405	0	0	0	Southeastern	No
I-805 NB On-Ramp @ 47th Street	AM	2	0	740	880	0	0	0	401	0	0	0	Encanto	No
I-805 NB On-Ramp @ Imperial Avenue	AM	2	0	1380	1589	0	0	0	1251	0	0	0	Encanto	No
SR-94 WB On-Ramp @ Euclid Avenue	AM	2	0	630	1522	0	0	0	454	0	0	0	Encanto	No
SR-94 WB On-Ramp @ Kelton Road	AM	1	1	480	577	0	0	0	295	0	0	0	Encanto	No
SR-94 WB On-Ramp @ Federal Boulevard / Home Avenue	AM	1	0	800	805	0	0	0	614	0	0	0	Encanto	No

Source: Chen Ryan Associates; June 2015

Notes:

SI = Significant Impact?

SOV = Single Occupancy Vehicle; HOV = High Occupancy Vehicle.

<sup>1</sup> Demand is the peak hour demand expected to use the on-ramp.

<sup>2</sup> Meter Rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans.

<sup>3</sup> Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.

<sup>4</sup> Delay = (Excess Demand / Meter Rate) X 60 min/hr.

<sup>5</sup> Queue = (Excess Demand) X 29 ft/veh.

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## 4.7 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted by the Southeastern San Diego and Encanto Neighborhoods Community Plan Update under the Preferred Plan.

### Roadway Mitigation Measures

#### Southeastern San Diego

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
10. Market Street, between Boundary Street and I-805 SB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 3-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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57. Division Street, between Main Street and Osborn Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps - Provide additional right-of-way and widen to provide a 2-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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79. 30<sup>th</sup> Street, between E Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street - Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.



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105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway – Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
123. Plaza Boulevard, between Division Street and Woodman Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic



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impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
138. Kelton Road, between SR-94 EB Ramps and Alvin Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
138. Alvin Street, between Kelton Road and Pitta Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
140. Pitta Street, between Alvin Street and Market Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact,

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associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

152. Woodman Street, between Imperial Avenue and Skyline Drive – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### *Southeastern San Diego & Encanto Neighborhoods*

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### *Sphere of Influence*

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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## Intersection Mitigation Measures:

### Southeastern San Diego

23. 28<sup>th</sup> Street / National Avenue – Provide additional right-of-way and National Avenue in the westbound direction to add a second westbound through lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
38. I-15 NB Ramps / Ocean View Boulevard – Provide additional right-of-way and widen Ocean View Boulevard and/or remove parking in the westbound direction to add a second westbound through lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
49. 40<sup>th</sup> Street / Imperial Avenue – Provide additional right-of-way and widen Imperial Avenue in the south-east bound direction to add an exclusive southeast-bound right-turn lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
63. 47<sup>th</sup> Street / I-805 SB Ramps – Provide additional right-of-way and widen the I-805 SB off-ramp to add a second southbound right-turn lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.

### Encanto Neighborhoods

68. Euclid Avenue / Imperial Avenue – Provide additional right-of-way and widen Imperial Avenue in the westbound direction to add a second westbound left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
69. Euclid Avenue / Olvera Avenue – Convert the existing exclusive southbound right-turn lane into a southbound through lane and optimize the intersection signal phasing to accommodate northbound/southbound traffic. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
79. Woodman Street / Skyline Drive – Provide additional right-of-way and widen Woodman Street in the northbound direction to add a second left-turn lane and an exclusive northbound right-turn lane with overlap, widen Skyline Drive in the westbound direction to add a second left-turn lane and a second through lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.

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### Sphere of Influence

7. I-5 SB Off-Ramp / Beardsley Street / Logan Avenue – Provide additional right-of-way and widen Logan Avenue in the eastbound direction and/or remove parking to add a second eastbound through lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
40. I-15 Ramps / Main Street – Provide additional right-of-way and widen the southbound I-15 off-ramp to add an exclusive southbound right-turn lane, restripe the existing southbound shared lane into an exclusive southbound left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.
43. I-5 SB Off-Ramp/Yama Street/Main Street – Provide additional right-of-way and widen the I-15 SB Off-Ramp to add a southbound right-through share lane, and widen Main Street in the eastbound direction to add an exclusive eastbound right-turn lane. The significant traffic impact, associated with the Preferred Plan, to this intersection would be fully mitigated with the implementation of this mitigation measure.

### **Freeway Mitigation Measures:**

**I-5, between 17<sup>th</sup> Street and SR-94; I-5, between SR-94 and Imperial Avenue; I-5, between Imperial Avenue and SR-75; I-5, between SR-75 and 28<sup>th</sup> Street; I-5, between 28<sup>th</sup> Street and I-15; and I-5, between I-15 and Main Street** – The SANDAG 2050 Revenue Constrained RTP includes operational improvements along I-5 between 17<sup>th</sup> Street and Main Street. These improvements are expected to be built by Year 2050. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**I-15, between I-805 and SR-94; I-15, between Market Street and Ocean View Boulevard** - The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along I-15 between I-805 and Ocean View Boulevard. These improvements are expected to be built by Year 2035. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The

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SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**I-805, between Market Street and Imperial Avenue; and I-805, between Imperial Avenue and 43<sup>rd</sup> Street** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along I-805 between Market Street and 43<sup>rd</sup> Street. These improvements are expected to be built by Year 2030. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**SR-94, between 17<sup>th</sup> Street and 25<sup>th</sup> Street; SR-94, between 25<sup>th</sup> Street and 28<sup>th</sup> Street; SR-94, between 28<sup>th</sup> Street and 30<sup>th</sup> Street; SR-94, between 30<sup>th</sup> Street and I-15; SR-94, between I-15 and Home Avenue; and SR-94, between Home Avenue and I-805** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along SR-94 between 17<sup>th</sup> Street and I-805. These improvements are expected to be built by Year 2020. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**SR-94, between I-805 and 47<sup>th</sup> Street; SR-94, between 47<sup>th</sup> Street and Euclid Avenue; SR-94, between Euclid Avenue and Kelton Road; SR-94, between Kelton Road and Federal Boulevard; SR-94, between Federal Boulevard and College Grove Way; and SR-94, between College Grove Way and College Avenue** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along SR-94 between I-805 and College Avenue. These improvements are expected to be built by Year 2040. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

## 5.0 Plan Alternatives

This chapter discusses quantifiable measures (such as trip generation and VMT) and assesses the potential level of traffic impacts associated with each of the plan alternatives by comparing the various alternatives to the Existing Conditions and the Preferred Plan. Trip generation, VMT, roadway segments, and freeway segments, were evaluated, as appropriate. The various alternatives and types of analysis performed include:

- No-Project (currently Adopted Community Plan) – trip generation analysis; and
- High Density Alternative – trip generation, VMT, and roadway and freeway segments analysis.

### 5.1 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Adopted Community Plan was adopted by City Council on July 13, 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

#### 5.1.1 Trip Generation

Trip generation analyses were conducted to compare the Adopted Community Plan and Existing Conditions. Trip generation rates for various land use categories were obtained from the *City of San Diego Trip Generation Manual* (May 2003).

**Table 5-1** and **Table 5-2** compares both the land use quantity and ADT by land use categories under the Adopted Community Plan and Existing Conditions, for the Southeastern San Diego and Encanto Neighborhoods communities, respectively.

Table 5-1  
Land Use Comparison – Southeastern San Diego  
Adopted Community Plan vs. Existing Conditions

Land Use	Adopted Community Plan		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Arterial Commercial	1,481.8 ksf	59,272	849.0 ksf	33,952	632.8 ksf	25,320
Automobile Dealership	0.0 Acres	0	0.1 Acres	36	-0.1 Acres	-36
Automobile Parts Sale	0.0 ksf	0	5.7 ksf	356	-5.7 ksf	-356
Automobile Repair Shop	42.7 ksf	855	42.7 ksf	855	0.0 ksf	0
Automobile Tire Store	3.5 ksf	88	9.2 ksf	231	-5.7 ksf	-143
Cemetery	123.4 Acres	617	123.4 Acres	617	0.0 Acres	0
Clinic (Medical Office)	184.2 ksf	9,209	188.5 ksf	9,424	-4.3 ksf	-215

**Table 5-1  
Land Use Comparison – Southeastern San Diego  
Adopted Community Plan vs. Existing Conditions**

Land Use	Adopted Community Plan		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Communications and Utilities	21.9 Acres	0	21.9 Acres	0	0.0 Acres	0
Community Shopping Center (100,000 SF or more)	698.2 ksf	48,871	698.2 ksf	48,871	0.0 ksf	0
Convenience Market Chain (Open Up to 16 Hours Per Day)	40.3 ksf	20,150	40.3 ksf	20,150	0.0 ksf	0
Day Care Center	109 child	545	0 child	0	109 child	545
Elementary School	6,454 Students	12,264	6,454 Students	12,264	0 Students	0
Fire/Police Station	27.7 ksf	830	27.7 ksf	830	0.0 ksf	0
Government Office/Civic Center	52.4 ksf	1,573	52.4 ksf	1,573	0.0 ksf	0
Hotel (Low-Rise) (Motel)	91 Rooms	819	91 Rooms	819	0 Rooms	0
Junior High School or Middle School	1,454 Students	2,036	1,454 Students	2,036	0 Students	0
Landscape Open Space (Undeveloped Park)	2.9 Acres	0	3.0 Acres	0	-0.1 Acres	0
Library	23.3 ksf	1,166	23.3 ksf	1,166	0.0 ksf	0
Light Industry - General	2,505.2 ksf	37,578	1,808.2 ksf	27,125	696.9 ksf	10,453
MF Residential less or equal 20 DU/acre	4,066 DU	32,528	3,963 DU	31,704	103 DU	824
MF Residential over 20 DU/acre	6,374 DU	38,244	5,434 DU	32,604	940 DU	5,640
Neighborhood Shopping Center (30,000 SF or more)	93.9 ksf	11,268	48.1 ksf	5,772	45.8 ksf	5,496
Office (Low-Rise - 1 ksf to 5 ksf)	10.8 ksf	443	18.7 ksf	767	-7.9 ksf	-324
Office (Low-Rise - 5 ksf to 10 ksf)	32.8 ksf	1,114	20.9 ksf	710	11.9 ksf	404
Office (Low-Rise - 10 ksf to 15 ksf)	0.0 ksf	0	26.2 ksf	733	-26.2 ksf	-733
Office (Low-Rise - 20 ksf to 25 ksf)	46.1 ksf	1,153	0.0 ksf	0	46.1 ksf	1,153
Office (Low-Rise - 50 ksf to 55 ksf)	51.7 ksf	1,034	97.8 ksf	1,957	-46.1 ksf	-923
Open Space Park or Preserve	34.3 Acres	173	36.2 Acres	182	-1.8 Acres	-9
Other Health Care	28.1 ksf	1,403	29.8 ksf	1,488	-1.7 ksf	-85
Other Public Services	22.6 ksf	226	28.5 ksf	285	-5.9 ksf	-59
Other Recreation - High (Developed Park)	6.0 Acres	299	6.0 Acres	299	0.0 Acres	0
Other Retail Trade and Strip Commercial	32.1 ksf	1,285	13.8 ksf	553	18.3 ksf	732
Other School	36.1 ksf	650	36.1 ksf	650	0.0 ksf	0



Table 5-1  
Land Use Comparison – Southeastern San Diego  
Adopted Community Plan vs. Existing Conditions

Land Use	Adopted Community Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Other Transportation	1.3 Acres	8	1.3 Acres	8	0.0 Acres	0
Other University or College (Community College)	7,667 Students	12,267	7,667 Students	12,267	0 Students	0
Park - Active	72.2 Acres	3,609	72.2 Acres	3,609	0.0 Acres	0
Parking Lot - Structure	0.8 Acres	0	0.8 Acres	0	0.0 Acres	0
Parking Lot - Surface	1.3 Acres	0	3.6 Acres	0	-2.3 Acres	0
Post Office	5.8 ksf	1,170	5.8 ksf	1,170	0.0 ksf	0
Public/Community Meeting Room Facility (Other Public Services)	2.7 ksf	80	9.9 ksf	297	-7.2 ksf	-217
Religious Facility (without day care)	641.8 ksf	3,206	628.0 ksf	3,137	13.8 ksf	69
Restaurant (High Turnover sit- down)	4.4 ksf	570	12.5 ksf	1,620	-8.1 ksf	-1,050
Scrap Yards/Auto Dismantling/Landfill	0.2 Acres	1	6.5 Acres	39	-6.2 Acres	-38
Senior Citizen Housing	70 DU	280	0 DU	0	70 DU	280
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	8 station	1,240	8 station	1,240	0 station	0
Service Station (with food mart)	12 station	1,800	12 station	1,800	0 station	0
Single Family Detached	4,789 DU	43,101	4,360 DU	39,240	429 DU	3,861
Single Family Multiple-Units	1,382 DU	12,438	1,271 DU	11,439	111 DU	999
Vacant and Undeveloped Land	2.2 Acres	0	64.7 Acres	0	-62.5 Acres	0
Warehousing	100.1 ksf	501	103.2 ksf	517	-3.0 ksf	-16
Wholesale Trade	15.7 ksf	1,099	20.1 ksf	1,405	-4.4 ksf	-306
<b>TOTAL</b>		<b>368,143</b>		<b>316,877</b>		<b>51,266</b>

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 5-1, the Southeastern San Diego Adopted Community Plan would generate 51,266 more daily trips when compared to the Existing Conditions, a 16.2% increase.



**Table 5-2  
Land Use Comparison - Encanto Neighborhoods  
Adopted Community Plan vs. Existing Conditions**

Land Use	Adopted Community Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Alternative Correctional Facility	0 Cells	0	300 Cells	600	-300 Cells	-600
Arterial Commercial	787.8 ksf	31,511	236.5 ksf	9,459	551.3 ksf	22,052
Automobile Dealership	0.1 Acres	28	0.1 Acres	28	0.0 Acres	0
Automobile Repair Shop	1.0 ksf	19	8.8 ksf	177	-7.9 ksf	-158
Carwash (Self service)	4 stall	400	4 stall	400	0 stall	0
Cemetery	44.7 Acres	224	44.7 Acres	224	0.0 Acres	0
Clinic (Medical Office)	27.6 ksf	1,382	0.0 ksf	0	27.6 ksf	1,382
Commercial Recreation	0.0 ksf	0	9.0 ksf	269	-9.0 ksf	-269
Communications and Utilities	36.5 Acres	0	40.4 Acres	0	-3.9 Acres	0
Community Shopping Center (100,000 SF or more)	171.1 ksf	11,978	81.0 ksf	5,673	90.1 ksf	6,305
Congregate Care Facility	0 Beds	0	18 Beds	54	-18 Beds	-54
Convenience Market Chain (Open Up to 16 Hours Per Day)	3.2 ksf	1,589	3.2 ksf	1,589	0.0 ksf	0
Day Care Center	145 child	725	145 child	725	0 child	0
Elementary School	5,114 Students	9,716	5,114 Students	9,716	0 Students	0
Fast Food (with or without Drive- through)	8.7 ksf	6,116	8.7 ksf	6,116	0.0 ksf	0
Fire/Police Station	14.5 ksf	435	14.5 ksf	435	0.0 ksf	0
Government Office (less or equal to 100,000 SF)	22.1 ksf	662	22.1 ksf	662	0.0 ksf	0
Government Office/Civic Center	18.5 ksf	556	18.5 ksf	556	0.0 ksf	0
Industrial Park	152.0 ksf	2,280	26.0 ksf	390	126.0 ksf	1,890
Junior High School or Middle School	1,547 Students	2,166	1,547 Students	2,166	0 Students	0
Landscape Open Space (Undeveloped Park)	0.1 Acres	0	0.1 Acres	0	0.0 Acres	0
Library	27.6 ksf	1,378	27.6 ksf	1,378	0.0 ksf	0
Light Industry - General	449.9 ksf	6,750	418.8 ksf	6,282	31.2 ksf	468
MF Residential less or equal 20 DU/acre	2,323 DU	18,584	1,466 DU	11,728	857 DU	6,856
MF Residential over 20 DU/acre	6,375 DU	38,250	1,916 DU	11,496	4,459 DU	26,754
Mobile Home Park	250 DU	1,250	610 DU	3,050	-360 DU	-1,800

**Table 5-2**  
**Land Use Comparison - Encanto Neighborhoods**  
**Adopted Community Plan vs. Existing Conditions**

Land Use	Adopted Community Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Neighborhood Shopping Center (30,000 SF or more)	28.8 ksf	3,451	62.0 ksf	7,436	-33.2 ksf	-3,985
Office (Low-Rise - 1 ksf to 5 ksf)	0.3 ksf	12	3.3 ksf	134	-3.0 ksf	-122
Office (Low-Rise - 10 ksf to 15 ksf)	10.9 ksf	304	11.1 ksf	312	-0.3 ksf	-8
Office (Low-Rise - 60 ksf to 65 ksf)	64.0 ksf	1,216	64.0 ksf	1,216	0.0 ksf	0
Office (Low-Rise - 65 ksf to 70 ksf)	66.1 ksf	1,256	71.8 ksf	1,364	-5.7 ksf	-108
Open Space Park or Preserve	203.8 Acres	1,018	201.3 Acres	1,006	2.5 Acres	12
Other Health Care	0.0 ksf	0	22.6 ksf	1,132	-22.6 ksf	-1,132
Other Recreation - High (Developed Park)	0.0 Acres	0	2.8 Acres	140	-2.8 Acres	-140
Other Retail Trade and Strip Commercial	0.0 ksf	0	12.6 ksf	502	-12.6 ksf	-502
Other School	14.5 ksf	261	24.3 ksf	437	-9.8 ksf	-176
Other Transportation	0.9 Acres	6	0.9 Acres	6	0.0 Acres	0
Park - Active	60.9 Acres	3,047	60.9 Acres	3,047	0.0 Acres	0
Parking Lot - Surface	2.6 Acres	0	6.6 Acres	0	-4.0 Acres	0
Public/Community Meeting Room Facility (Other Public Services)	16.0 ksf	480	37.8 ksf	1,135	-21.8 ksf	-655
Rail Station/Transit Center	2.7 Acres	815	5.3 Acres	1,596	-2.6 Acres	-781
Railroad Right of Way	20.4 Acres	0	20.4 Acres	0	0.0 Acres	0
Religious Facility (without day care)	305.2 ksf	1,525	307.6 ksf	1,537	-2.4 ksf	-12
Restaurant (High Turnover sit- down)	0.0 ksf	0	4.2 ksf	552	-4.2 ksf	-552
Senior High School	3,283 Students	5,909	3,283 Students	5,909	0 Students	0
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	12 station	1,860	12 station	1,860	0 station	0
Service Station (with food mart)	26 station	3,900	26 station	3,900	0 station	0
Single Family Detached	8,229 DU	74,061	8,054 DU	72,486	175 DU	1,575
Single Family Multiple-Units	1,197 DU	10,773	1,174 DU	10,566	23 DU	207
Spaced Rural Residential	2 DU	24	2 DU	24	0 DU	0
Supermarket (Stand-alone)	4.4 ksf	660	4.4 ksf	660	0.0 ksf	0

Table 5-2  
Land Use Comparison - Encanto Neighborhoods  
Adopted Community Plan vs. Existing Conditions

Land Use	Adopted Community Plan		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Vacant and Undeveloped Land	1.5 Acres	0	190.3 Acres	0	-188.8 Acres	0
Warehousing	0.0 ksf	0	1.7 ksf	8	-1.7 ksf	-8
<b>TOTAL</b>		247,657		191,218		56,439

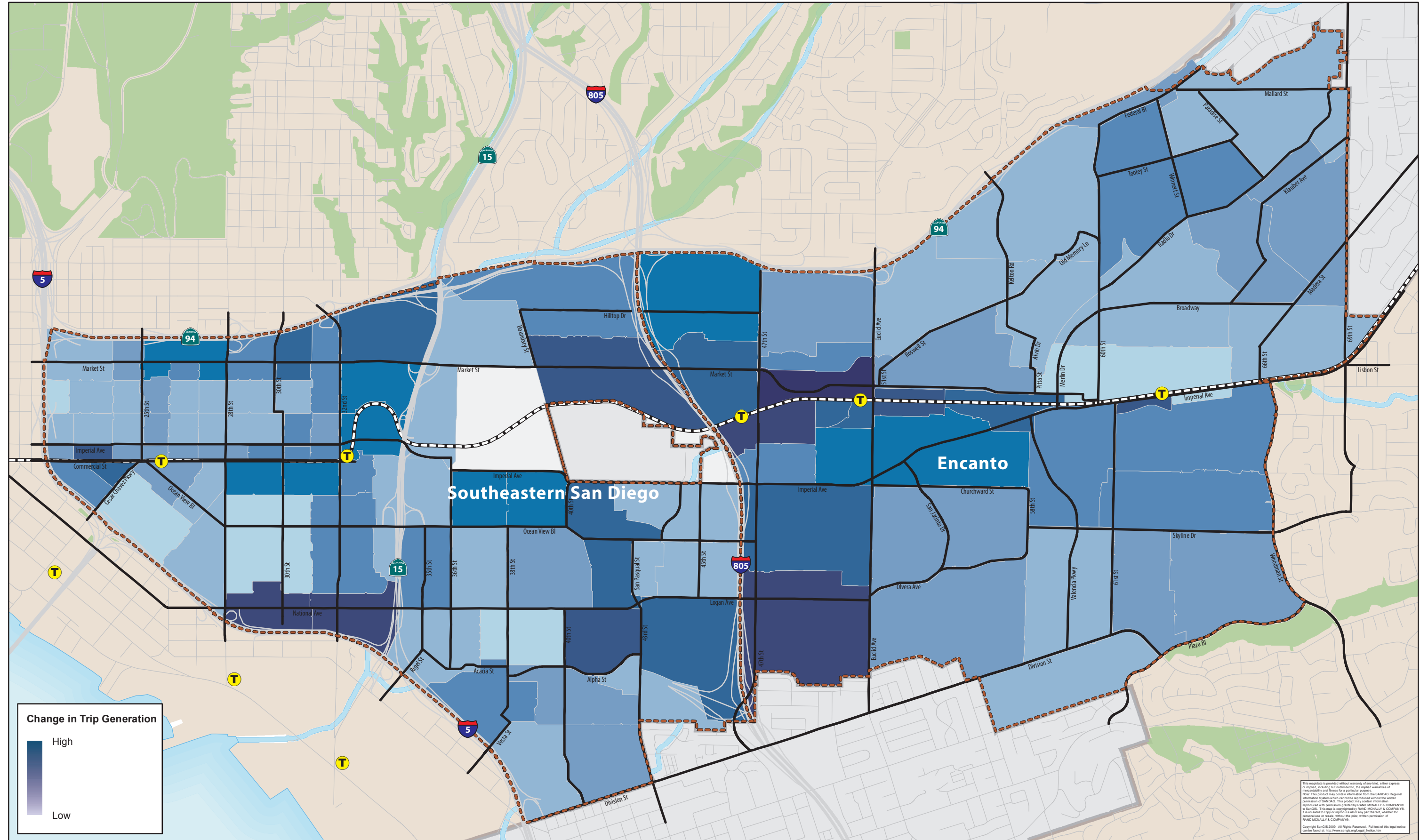
Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 5-2, the Encanto Neighborhoods Adopted Community Plan would generate 56,439 more daily trips when compared to Existing Conditions, a 29.5% increase.

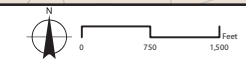
For comparison purposes, as well as to verify land use growth assumptions within the Encanto Neighborhoods community, manual trip generation calculations by traffic analysis zone (TAZ) were conducted for both the Base Year land uses and the Adopted Community Plan buildout land uses. The vehicular trip generation growth within the Southeastern San Diego and Encanto Neighborhoods communities are displayed in Figure 5 1 and Appendix A, the majority of the TAZs within the Southeastern San Diego community are not anticipated to experience much (if any) growth in vehicular trip generation under buildout of the Preferred Plan. The majority of growth within the community is anticipated to occur near the 25th trolley station, as well as along the freeway corridors, particularly around the northwest quadrant of I-15 and I-5 connector, and the northwest quadrant of the I-805/Market Street interchange. Whereas, the majority of the TAZs within the Encanto Neighborhoods community are not anticipated to experience much (if any) growth in vehicular trip generation, especially along the northeastern and southeastern area of the community, under buildout of the Adopted Community Plan (No Project). The majority of growth within the community is anticipated to occur near the 47th Street and Euclid Avenue trolley stations within the proposed village district, as well as along the freeway corridors, particularly around Logan Avenue between I-805 and Euclid Avenue.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



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Data Source: City of San Diego, 2012; SanGIS Regional Data Warehouse, 2012; Dyett & Bhatia, 2012



## 5.2 High Density Alternative

This chapter provides a comparison of the High Density Alternative and Existing Conditions analysis results. Trip generation, VMT, roadway, and freeway analyses are provided below. Similar to the Preferred Plan, the High Density Alternative land uses were developed by the project consultant team led by Dyett & Bhatia with collaboration from City staff and community members, and the projected traffic volumes (roadway, and freeway) were developed using the SANDAG Series 12 Regional Model, Year 2035. Final SANDAG Series 12 Future Year Forecast Model Results for the High Density Alternative, including manual adjustment, are provided in **Appendix M**.

### 5.2.1 Trip Generation

Trip generation analyses were conducted to compare the High Density Alternative and Existing Conditions. Trip generation rates for various land use categories were obtained from the *City of San Diego Trip Generation Manual* (May 2003).

**Table 5-3** and **Table 5-4** compares both the land use quantity and ADT by land use categories under the High Density Alternative and Existing Conditions, for the Southeastern San Diego and Encanto Neighborhoods communities, respectively.

Table 5-3  
Land Use Comparison - Southeastern  
High Density vs. Existing Conditions

Land Use	High Density		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Arterial Commercial	1,622.8 ksf	64,906	849.0 ksf	33,952	773.8 ksf	30,954
Automobile Dealership	0.1 Acres	36	0.1 Acres	36	0.0 Acres	0
Automobile Parts Sale	5.7 ksf	356	5.7 ksf	356	0.0 ksf	0
Automobile Repair Shop	21.9 ksf	437	42.7 ksf	855	-20.9 ksf	-418
Automobile Tire Store	7.6 ksf	190	9.2 ksf	231	-1.6 ksf	-41
Cemetery	123.4 Acres	617	123.4 Acres	617	0.0 Acres	0
Clinic (Medical Office)	188.5 ksf	9,424	188.5 ksf	9,424	0.0 ksf	0
Communications and Utilities	19.1 Acres	0	21.9 Acres	0	-2.9 Acres	0
Community Shopping Center (100,000 SF or more)	799.9 ksf	55,994	698.2 ksf	48,871	101.8 ksf	7,123
Convenience Market Chain (Open Up to 16 Hours Per Day)	40.3 ksf	20,150	40.3 ksf	20,150	0.0 ksf	0
Day Care Center	109 child	545	0 child	0	109 child	545
Elementary School	6,454 Students	12,264	6,454 Students	12,264	0 Students	0
Fire/Police Station	27.7 ksf	830	27.7 ksf	830	0.0 ksf	0

Table 5-3  
Land Use Comparison - Southeastern  
High Density vs. Existing Conditions

Land Use	High Density		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Government Office/Civic Center	52.4 ksf	1,573	52.4 ksf	1,573	0.0 ksf	0
Hotel (Low-Rise) (Motel)	91 Rooms	819	91 Rooms	819	0 Rooms	0
Industrial Park	113.5 ksf	1,703	0.0 ksf	0	113.5 ksf	1,703
Junior High School or Middle School	1,454 Students	2,036	1,454 Students	2,036	0 Students	0
Landscape Open Space (Undeveloped Park)	3.0 Acres	0	3.0 Acres	0	0.0 Acres	0
Library	23.3 ksf	1,166	23.3 ksf	1,166	0.0 ksf	0
Light Industry - General	1,799.5 ksf	26,994	1,808.2 ksf	27,125	-8.7 ksf	-131
MF Residential less or equal 20 DU/acre	4,281 DU	34,248	3,963 DU	31,704	318 DU	2,544
MF Residential over 20 DU/acre	8,237 DU	49,422	5,434 DU	32,604	2,803 DU	16,818
Neighborhood Shopping Center (30,000 SF or more)	30.9 ksf	3,709	48.1 ksf	5,772	-17.2 ksf	-2,063
Office (Low-Rise - 1 ksf to 5 ksf)	14.0 ksf	576	18.7 ksf	767	-4.7 ksf	-191
Office (Low-Rise - 5 ksf to 10 ksf)	37.7 ksf	1,283	20.9 ksf	710	16.9 ksf	573
Office (Low-Rise - 10 ksf to 15 ksf)	23.4 ksf	655	26.2 ksf	733	-2.8 ksf	-78
Office (Low-Rise - 20 ksf to 25 ksf)	43.0 ksf	1,075	0.0 ksf	0	43.0 ksf	1,075
Office (Low-Rise - 50 ksf to 55 ksf)	97.8 ksf	1,957	97.8 ksf	1,957	0.0 ksf	0
Office (Low-Rise - 125138 ksf)	125.1 ksf	2,002	0.0 ksf	0	125.1 ksf	2,002
Open Space Park or Preserve	35.2 Acres	177	36.2 Acres	182	-0.9 Acres	-5
Other Health Care	29.8 ksf	1,488	29.8 ksf	1,488	0.0 ksf	0
Other Public Services	23.0 ksf	230	28.5 ksf	285	-5.5 ksf	-55
Other Recreation - High (Developed Park)	6.0 Acres	299	6.0 Acres	299	0.0 Acres	0
Other Retail Trade and Strip Commercial	12.6 ksf	505	13.8 ksf	553	-1.2 ksf	-48
Other School	36.1 ksf	650	36.1 ksf	650	0.0 ksf	0
Other Transportation	0.0 Acres	0	1.3 Acres	8	-1.3 Acres	-8
Other University or College (Community College)	7,667 Students	12,267	7,667 Students	12,267	0 Students	0
Park - Active	88.9 Acres	4,444	72.2 Acres	3,609	16.7 Acres	835
Parking Lot - Structure	0.0 Acres	0	0.8 Acres	0	-0.8 Acres	0



**Table 5-3  
Land Use Comparison - Southeastern  
High Density vs. Existing Conditions**

Land Use	High Density		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Parking Lot - Surface	3.1 Acres	0	3.6 Acres	0	-0.5 Acres	0
Post Office	5.8 ksf	1,170	5.8 ksf	1,170	0.0 ksf	0
Public/Community Meeting Room Facility (Other Public Services)	9.9 ksf	297	9.9 ksf	297	0.0 ksf	0
Religious Facility (without day care)	636.4 ksf	3,179	628.0 ksf	3,137	8.4 ksf	42
Restaurant (High Turnover sit-down)	10.2 ksf	1,330	12.5 ksf	1,620	-2.2 ksf	-290
Scrap Yards/Auto Dismantling/Landfill	0.0 Acres	0	6.5 Acres	39	-6.5 Acres	-39
Senior High School	0 Students	0	0 Students	0	0 Students	0
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	8 station	1,240	8 station	1,240	0 station	0
Service Station (with food mart)	12 station	1,800	12 station	1,800	0 station	0
Single Family Detached	4,455 DU	40,095	4,360 DU	39,240	95 DU	855
Single Family Multiple-Units	1,307 DU	11,763	1,271 DU	11,439	36 DU	324
Vacant and Undeveloped Land	10.2 Acres	0	64.7 Acres	0	-54.5 Acres	0
Warehousing	76.3 ksf	383	103.2 ksf	517	-26.8 ksf	-134
Wholesale Trade	15.7 ksf	1,099	20.1 ksf	1,405	-4.4 ksf	-306
<b>TOTAL</b>	-	378,463	-	316,877	-	61,586

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 5-3, the Southeastern San Diego High Density Alternative would generate 61,586 more daily trips when compared to Existing Conditions, a 19.4% increase.

Table 5-4  
Land Use Comparison - Encanto Neighborhoods  
High Density vs. Existing Conditions

Land Use	High Density		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Alternative Correctional Facility	0 Cells	0	300 Cells	600	-300 Cells	-600
Arterial Commercial	1,175.6 ksf	47,026	236.5 ksf	9,459	939.1 ksf	37,567
Automobile Dealership	0.1 Acres	28	0.1 Acres	28	0.0 Acres	0
Automobile Repair Shop	8.8 ksf	177	8.8 ksf	177	0.0 ksf	0
Carwash (Self service)	0 stall	0	4 stall	400	-4 stall	-400
Cemetery	40.5 Acres	202	44.7 Acres	224	-4.3 Acres	-22
Clinic (Medical Office)	27.6 ksf	1,382	0.0 ksf	0	27.6 ksf	1,382
Commercial Recreation	0.0 ksf	0	9.0 ksf	269	-9.0 ksf	-269
Communications and Utilities	37.3 Acres	0	40.4 Acres	0	-3.1 Acres	0
Community Shopping Center (100,000 SF or more)	291.3 ksf	20,389	81.0 ksf	5,673	210.2 ksf	14,716
Congregate Care Facility	0 Beds	0	18 Beds	54	-18 Beds	-54
Convenience Market Chain (Open Up to 16 Hours Per Day)	0.0 ksf	0	3.2 ksf	1,589	-3.2 ksf	-1,589
Day Care Center	145 child	725	145 child	725	0 child	0
Elementary School	5,114 Students	9,716	5,114 Students	9,716	0 Students	0
Fast Food (with or without Drive- through)	0.0 ksf	0	8.7 ksf	6,116	-8.7 ksf	-6,116
Fire/Police Station	14.5 ksf	435	14.5 ksf	435	0.0 ksf	0
Government Office (less or equal to 100,000 SF)	22.1 ksf	662	22.1 ksf	662	0.0 ksf	0
Government Office/Civic Center	0.0 ksf	0	18.5 ksf	556	-18.5 ksf	-556
Industrial Park	152.0 ksf	2,280	26.0 ksf	390	126.0 ksf	1,890
Junior High School or Middle School	1,547 Students	2,166	1,547 Students	2,166	0 Students	0
Landscape Open Space (Undeveloped Park)	0.1 Acres	0	0.1 Acres	0	0.0 Acres	0
Library	27.6 ksf	1,378	27.6 ksf	1,378	0.0 ksf	0
Light Industry - General	345.0 ksf	5,175	418.8 ksf	6,282	-73.8 ksf	-1,107
MF Residential less or equal 20 DU/acre	999 DU	7,992	1,466 DU	11,728	-467 DU	-3,736
MF Residential over 20 DU/acre	13,166 DU	78,996	1,916 DU	11,496	11,250 DU	67,500
Mobile Home Park	250 DU	1,250	610 DU	3,050	-360 DU	-1,800



Table 5-4  
Land Use Comparison - Encanto Neighborhoods  
High Density vs. Existing Conditions

Land Use	High Density		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Neighborhood Shopping Center (30,000 SF or more)	70.7 ksf	8,479	62.0 ksf	7,436	8.7 ksf	1,043
Office (Low-Rise - 1 ksf to 5 ksf)	0.0 ksf	0	3.3 ksf	134	-3.3 ksf	-134
Office (Low-Rise - 10 ksf to 15 ksf)	0.0 ksf	0	11.1 ksf	312	-11.1 ksf	-312
Office (Low-Rise - 60 ksf to 65 ksf)	64.0 ksf	1,216	64.0 ksf	1,216	0.0 ksf	0
Office (Low-Rise - 65 ksf to 70 ksf)	74.5 ksf	1,416	71.8 ksf	1,364	2.8 ksf	52
Open Space Park or Preserve	207.6 Acres	1,037	201.3 Acres	1,006	6.3 Acres	31
Other Health Care	0.0 ksf	0	22.6 ksf	1,132	-22.6 ksf	-1,132
Other Recreation - High (Developed Park)	0.0 Acres	0	2.8 Acres	140	-2.8 Acres	-140
Other Retail Trade and Strip Commercial	11.4 ksf	455	12.6 ksf	502	-1.2 ksf	-47
Other School	14.5 ksf	261	24.3 ksf	437	-9.8 ksf	-176
Other Transportation	0.0 Acres	0	0.9 Acres	6	-0.9 Acres	-6
Park - Active	62.5 Acres	3,124	60.9 Acres	3,047	1.5 Acres	77
Parking Lot - Surface	0.3 Acres	0	6.6 Acres	0	-6.3 Acres	0
Public Storage	124.9 ksf	250	0.0 ksf	0	124.9 ksf	250
Public/Community Meeting Room Facility (Other Public Services)	21.4 ksf	643	37.8 ksf	1,135	-16.4 ksf	-492
Rail Station/Transit Center	2.8 Acres	833	5.3 Acres	1,596	-2.5 Acres	-763
Religious Facility (without day care)	320.5 ksf	1,601	307.6 ksf	1,537	12.8 ksf	64
Restaurant (High Turnover sit-down)	21.2 ksf	2,761	4.2 ksf	552	17.0 ksf	2,209
Road Right of Way	690.7 Acres	0	690.7 Acres	0	0.0 Acres	0
Senior High School	3,283 Students	5,909	3,283 Students	5,909	0 Students	0
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	12 station	1,860	12 station	1,860	0 station	0
Service Station (with food mart)	26 station	3,900	26 station	3,900	0 station	0
Single Family Detached	7,914 DU	71,226	8,054 DU	72,486	-140 DU	-1,260
Single Family Multiple-Units	1,108 DU	9,972	1,174 DU	10,566	-66 DU	-594
Spaced Rural Residential	2 DU	24	2 DU	24	0 DU	0
Supermarket (Stand-alone)	4.4 ksf	660	4.4 ksf	660	0.0 ksf	0

Table 5-4  
Land Use Comparison - Encanto Neighborhoods  
High Density vs. Existing Conditions

Land Use	High Density		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Vacant and Undeveloped Land	1.5 Acres	0	190.3 Acres	0	-188.8 Acres	0
Warehousing	0.0 ksf	0	1.7 ksf	8	-1.7 ksf	-8
<b>TOTAL</b>	-	296,686	-	191,218	-	105,468

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

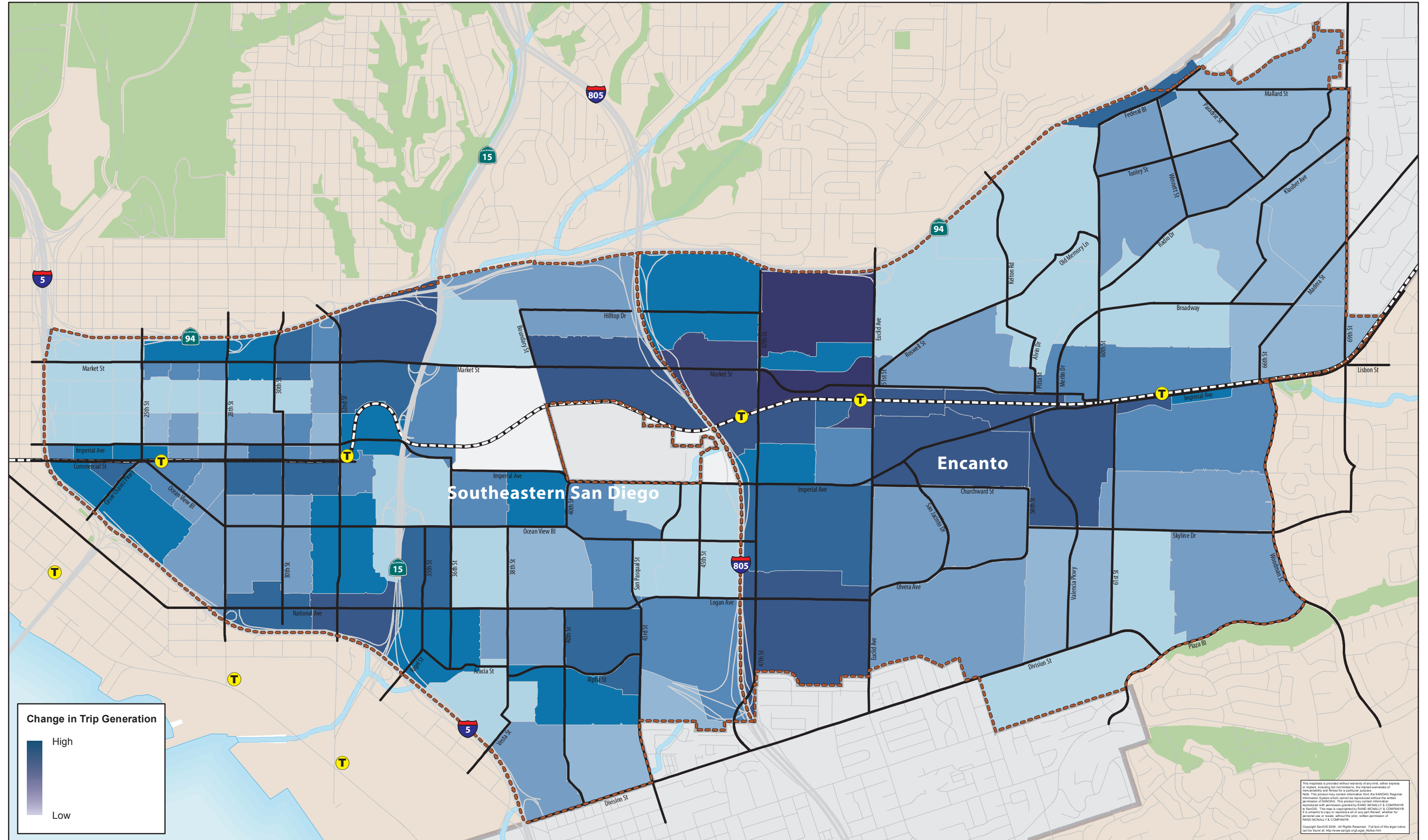
As shown in Table 5-4, the Encanto Neighborhoods High Density Alternative would generate 105,468 more daily trips when compared to the Existing Conditions, a 55.1% increase.

For comparison purposes, as well as to verify land use growth assumptions within the Southeastern San Diego and Encanto Neighborhoods communities, manual trip generation calculations by traffic analysis zone (TAZ) were conducted for both the Base Year land uses and the High Density Alternative buildout land uses. The vehicular trip generation growth within the Southeastern San Diego and Encanto Neighborhoods communities are displayed in **Figure 5-2**.

Additionally, a by TAZ comparison of the vehicular trip generation for Base Year vs. High Density Alternative is provided in Appendix A.

As shown in Figure 5 2 and Appendix A, the majority of the TAZs within the Southeastern San Diego community are not anticipated to experience much (if any) growth in vehicular trip generation under buildout of the High Density Alternative. The majority of growth within the community is anticipated to occur near the 25th and 32nd trolley stations within the proposed village district, as well as along the freeway corridors, particularly around the southwest quadrant of I-15 and SR-94 connector and the northwest quadrant of I-15 and I-5 connector. While, the majority of the TAZs within the Encanto Neighborhoods community are not anticipated to experience much (if any) growth in vehicular trip generation, especially along the northeastern and southeastern area of the community, under buildout of the High Density Alternative. The majority of growth within the community is anticipated to occur near the 47th Street and Euclid Avenue trolley stations within the proposed village district, as well as along the freeway corridors, particularly around Imperial Avenue between I-805 and 61st Street, 47th Street between SR-94 and Imperial Avenue, Euclid Avenue between SR-94 and Imperial Avenue, and Logan Avenue between I-805 and Euclid Avenue.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES



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Figure 5-2: Trip Generation Growth by TAZ - High Density Alternative versus Existing Conditions



Data Source:  
City of San Diego, 2012; SanGIS Regional  
Data Warehouse, 2012;  
Dyett & Bhatia, 2012



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### 5.2.2 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 High Density Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Southeastern community, including trips to/from and within the community. **Table 5-5** displays the total VMT generated within the Southeastern San Diego and Encanto Neighborhoods communities and the average trip length under the High Density Alternative, Base Year, and Preferred Plan conditions. VMT calculations for the Southeastern San Diego and Encanto Neighborhoods communities under the High Density Alternative are included in Appendix M.

As shown, the Southeastern San Diego community, when compared to the San Diego Region, has a shorter average trip length and daily VMT by population under both the Base Year (Average Trip Length of 1.39 miles vs. 5.18 miles; VMT of 5.10 miles vs. 27.30 miles, respectively) and future scenarios (Average Trip Length of 1.43 miles vs. 5.37 miles; VMT of 5.00 miles vs. 26.80 miles, respectively).

The Encanto Neighborhoods community, when compared to the San Diego Region, has a shorter average trip length and daily VMT by population under both the Base Year (Average Trip Length of 2.01 miles vs. 5.18 miles; VMT of 4.30 miles vs. 27.30 miles, respectively) and future scenarios (Average Trip Length of 1.89 miles vs. 5.37 miles; VMT of 3.60 miles vs. 26.80 miles, respectively).

The VMT by population in the Southeastern San Diego community would decrease by 0.10 mile (-2.0%), and the VMT by population in the Encanto Neighborhoods community would decrease by 0.70 mile (-13.3%), while the San Diego Region would decrease slightly less, by 0.50 miles (-1.8%).

**Table 5-5**  
**Vehicle Miles Traveled (VMT) Comparison**  
**High Density Alternative vs. Existing Conditions**

Measure	Southeastern San Diego				Encanto Neighborhoods				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	291,677	362,950	71,273	24.4%	206,790	313,294	106,504	51.5%	85,331,631	108,496,206	23,164,575	27.1%
Total # of Auto Trips	210,065	253,574	43,509	20.7%	102,915	165,634	62,719	60.9%	16,458,692	20,206,072	3,747,380	22.8%
Average Trip Length* (miles)	1.39	1.43	0.04	3.1%	2.01	1.89	-0.12	-5.9%	5.18	5.37	0.18	3.6%
Population	56,847	72,318	15,471	27.2%	48,648	85,872	37,224	76.5%	3,130,717	4,047,273	916,556	29.3%
Daily VMT by Population (miles)	5.10	5.00	-0.10	-2.0%	4.30	3.60	-0.70	-16.3%	27.30	26.80	-0.50	-1.8%

Source: SANDAG, Chen Ryan Associates; June 2015

Note:

\*Average trip length is estimated by dividing the total VMT by the total # of auto trips.

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### 5.2.3 Roadway Segment Analysis

The roadway cross section and functional classification under the High Density Alternative is assumed to be the same as those under the Preferred Plan. **Table 5-6** displays the level of service analysis results for the study area roadway segments within the study area under Existing Conditions and the High Density Alternative. **Figure 5-3** displays the roadway traffic volumes and level of service for roadways within the project study area under the High Density Alternative.

As shown in the table, the following seventy-three (73) study area roadway segments are projected to operate at LOS E or F under buildout of the High Density Alternative, with forty-one (41) roadway segments located within Southeastern San Diego, twenty-five (25) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence. They are as follow:

#### Southeastern San Diego

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street (LOS E);
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street (LOS F);
10. Market Street, between Boundary Street and I-805 SB Ramps (LOS F);
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street (LOS E);
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street (LOS F);
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street (LOS F);
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street (LOS E);
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street (LOS F);
21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street (LOS F);
37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street (LOS E);
39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps (LOS F);
41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street (LOS E);
42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street (LOS E);
48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street (LOS F);
49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps (LOS F);
50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street (LOS F);
51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street (LOS F);
57. Division Street, between Main Street and Osborn Street (LOS F);
56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street (LOS E);
66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps (LOS F);
68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp (LOS F);
69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street (LOS F);
70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);
73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street (LOS F);
74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard (LOS E);



**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
1	Hilltop Drive	Boundary Street & I-805	2C MF	8,000	5,500	D	0.69	8,000	2,885	B	0.36	0.33	Southeastern	N
2		I-805 & 47th Street	2C MF	8,000	5,900	D	0.74	8,000	4,435	C	0.55	0.19	Encanto	N
3	Market Street	17th Street & 19th Street	4C w/ CLTL	30,000	8,600	A	0.29	30,000	7,895	A	0.26	0.03	Southeastern	N
4		19th Street & 25th Street	2C w/ CLTL	15,000	12,400	D	0.83	30,000	7,835	A	0.26	0.57	Southeastern	N
5		25th Street & 28th Street	2C w/ CLTL	15,000	14,200	E	0.95	30,000	9,604	A	0.32	0.63	Southeastern	Y
6		28th Street & 32nd Street	2C w/ CLTL	15,000	18,300	F	1.22	30,000	10,745	B	0.36	0.86	Southeastern	Y
7		32nd Street & I-15 SB Ramps	4M w/ RM	40,000	29,400	C	0.74	40,000	17,180	B	0.43	0.31	Southeastern	N
8		I-15 SB Ramps & I-15 NB Ramps	4M w/ RM	40,000	28,000	C	0.70	40,000	22,320	C	0.56	0.14	Southeastern	N
9		I-15 NB Ramps & Boundary Street	4M w/ RM	40,000	31,600	D	0.79	40,000	22,310	C	0.56	0.23	Southeastern	N
10		Boundary Street & I-805 SB Ramps	2C w/ CLTL	15,000	22,800	F	1.52	15,000	14,460	E	0.96	0.56	Southeastern	Y
11		I-805 SB Ramps & I-805 NB Ramps	2C w/ CLTL	15,000	21,300	F	1.42	40,000	17,543	B	0.44	0.98	Southeastern /Encanto	Y
12		I-805 NB Ramps & 47th Street	4M w/ RM	40,000	24,000	C	0.6	30,000	14,860	C	0.50	0.10	Encanto	N
13		47th Street & Euclid Avenue	4M w/ RM	40,000	27,800	C	0.62	15,000	10,022	D	0.67	-0.05	Encanto	N
14	Market Street/Akins Avenue	Euclid Avenue & 60th Street	2C NF	10,000	11,900	F	1.19	10,000	11,136	F	1.11	0.08	Encanto	Y
15	Imperial Avenue	17th Street & 19th Street	4C w/o CLTL	15,000	13,200	E	0.88	15,000	6,582	B	0.44	0.44	Southeastern	Y
16		19th Street & 25th Street	2C Com	8,000	10,100	F	1.26	15,000	5,196	B	0.35	0.91	Southeastern	Y
17		25th Street & 28th Street	2C Com	8,000	10,600	F	1.33	15,000	5,257	B	0.35	0.98	Southeastern	Y
18		28th Street & 30th Street	2C Com	8,000	8,000	E	1.00	15,000	5,027	B	0.34	0.66	Southeastern	Y
19		30th Street & 32nd Street	2C Com	8,000	5,800	D	0.73	15,000	4,152	A	0.28	0.45	Southeastern	N
20		32nd Street & 36th Street	2C Com	8,000	11,500	F	1.44	15,000	6,555	B	0.44	1.00	Southeastern	Y
21		36th Street & 40th Street	2C NF	10,000	12,700	F	1.27	10,000	7,909	D	0.79	0.48	Southeastern	Y
22		40th Street & I-805 SB Ramps	4M w/ RM	40,000	27,200	C	0.68	40,000	10,301	A	0.26	0.42	Southeastern	N

**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?	
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C				
23	Imperial Avenue	I-805 SB Ramps & I-805 NB Ramps	4M w/ RM	40,000	30,000	C	0.75	40,000	25,741	C	0.64	0.11	Southeastern /Encanto	N	
24		I-805 NB Ramps & 47th Street	4M w/ RM	40,000	39,900	E	1.00	40,000	33,370	D	0.83	0.17	Encanto	Y	
25		47th Street & Euclid Avenue	4M w/ RM	40,000	36,200	E	0.91	40,000	30,600	D	0.77	0.14	Encanto	Y	
26		Euclid Avenue & San Jacinto Drive	4M w/ RM	40,000	29,900	C	0.75	40,000	23,685	C	0.59	0.16	Encanto	N	
27		San Jacinto Drive & Valencia Parkway	2C w/ CLTL	15,000	28,700	F	1.91	15,000	19,408	F	1.29	0.62	Encanto	Y	
28		Valencia Parkway & Woodman Street	4M w/ RM	40,000	19,700	B	0.49	40,000	17,745	B	0.44	0.05	Encanto	N	
29		Woodman Street & 69th Street	4M w/ RM	40,000	25,700	C	0.64	40,000	16,738	B	0.42	0.22	Encanto	N	
30		69th Street & Viewcrest Drive	4M w/ RM	40,000	16,700	B	0.42	40,000	8,205	A	0.21	0.21	Encanto (Skyline/Paradise Hills)	N	
31		Commercial Street	17th Street & 19th Street	2C MF	8,000	7,300	E	0.91	8,000	1,192	A	0.15	0.76	Downtown	Y
32			19th Street & 25th Street	2C MF	8,000	5,400	D	0.68	8,000	1,208	A	0.15	0.53	Southeastern	N
33	25th Street & 28th Street		2C MF	8,000	3,800	C	0.48	8,000	1,065	A	0.13	0.35	Southeastern	N	
34	28th Street & 30th Street		2C MF	8,000	5,000	C	0.63	8,000	929	A	0.12	0.51	Southeastern	N	
35	30th Street & 32nd Street		2C MF	8,000	4,400	C	0.55	8,000	567	A	0.07	0.48	Southeastern	N	
36	Ocean View Boulevard	25th Street & 28th Street	2C MF	8,000	6,500	D	0.81	8,000	2,207	A	0.28	0.53	Southeastern	N	
37		28th Street & 30th Street	2C MF	8,000	7,700	E	0.96	8,000	5,524	D	0.69	0.27	Southeastern	Y	
38		30th Street & 32nd Street	2C w/ CLTL	15,000	10,300	D	0.69	15,000	7,985	C	0.53	0.16	Southeastern	N	
39		32nd Street & I-15 SB Ramps	2C w/ CLTL	15,000	17,000	F	1.13	15,000	13,905	E	0.93	0.20	Southeastern	Y	
40		I-15 SB Ramps & I-15 NB Ramps	4M w/ RM	40,000	18,300	B	0.46	40,000	17,094	B	0.43	0.03	Southeastern	N	
41		I-15 NB Ramps & 36th Street	2C w/ CLTL	15,000	15,200	F	1.01	15,000	13,730	E	0.92	0.09	Southeastern	Y	
42		36th Street & 40th Street	2C w/ CLTL	15,000	14,600	E	0.97	15,000	12,009	D	0.80	0.17	Southeastern	Y	
43		40th Street & 47th Street	2C MF	8,000	11,900	F	1.49	8,000	4,965	C	0.62	0.87	Southeastern	Y	



**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
44	National Avenue	Commercial Street & Beardsley Street	2C w/ CLTL	15,000	12,400	D	0.83	15,000	2,561	A	0.17	0.66	Barrio Logan	N
45		Beardsley Street & SR-75 Off-Ramp	2C MF	8,000	16,200	F	2.03	8,000	3,725	C	0.47	1.56	Barrio Logan	Y
46		SR-75 Off-Ramp & 26th Street	2C w/ CLTL	15,000	6,500	B	0.43	15,000	3,395	A	0.23	0.20	Barrio Logan	N
47	National Avenue	26th Street & 27th Street/I-5 SB Off-Ramp	2C Com	8,000	12,200	F	1.53	8,000	11,450	F	1.43	0.10	Barrio Logan	Y
48		27th Street/I-5 SB Off-Ramp & 28th Street	2C NF	10,000	16,900	F	1.69	30,000	15,927	C	0.53	1.16	Southeastern	Y
49		28th Street & I-5 NB Ramps	2C w/ CLTL	15,000	21,000	F	1.4	15,000	18,431	F	1.23	0.17	Southeastern	Y
50		I-5 NB Ramps & 32nd Street	2C NF	10,000	14,900	F	1.49	15,000	10,020	D	0.67	0.82	Southeastern	Y
51		32nd Street & 43rd Street	2C NF	10,000	14,000	F	1.40	15,000	10,572	D	0.7	0.70	Southeastern	Y
52	Logan Avenue	43rd Street & 45th Street	2C w/ CLTL	15,000	10,900	D	0.73	15,000	7,691	C	0.51	0.22	Southeastern	N
53		45th Street & 47th Street	4C w/o CLTL	15,000	14,900	E	0.99	15,000	8,190	C	0.55	0.44	Southeastern /Encanto	Y
54		47th Street & Euclid Avenue	2C w/ CLTL	15,000	16,000	F	1.07	30,000	8,785	A	0.29	0.78	Encanto	Y
55	Acacia Street	36th Street & 38th Street	2C MF	8,000	5,200	B	0.65	8,000	1,451	A	0.18	0.47	Southeastern	N
56	Alpha Street	38th Street & 43rd Street	2C MF	8,000	7,000	E	0.88	8,000	5,554	D	0.69	0.19	Southeastern	Y
57	Division Street	Main Street & Osborn Street	2C w/ CLTL	15,000	17,100	F	1.14	15,000	15,920	F	1.06	0.08	Southeastern	Y
58		Osborn Street & Highland Avenue	2C w/ CLTL	15,000	12,900	D	0.86	15,000	10,265	D	0.68	0.18	Southeastern	N
59		Highland Avenue & Palm Avenue	4S	30,000	14,100	C	0.47	30,000	10,466	B	0.35	0.12	National City	N
60		Palm Avenue & Euclid Avenue	4M w/ RM	40,000	19,100	B	0.48	40,000	17,370	B	0.43	0.05	National City	N
61		Euclid Avenue & Harbison Avenue	4C w/ CLTL	30,000	13,600	B	0.45	30,000	12,780	B	0.43	0.02	National City	N
62		Harbison Avenue & 58th Street	2C w/ CLTL	15,000	14,500	E	0.97	8,000	11,225	F	1.4	-0.43	Encanto	N
63		58th Street & Valencia Parkway	2C w/ CLTL	15,000	13,700	E	0.91	15,000	10,678	D	0.71	0.20	Encanto	Y
64		Valencia Parkway & 61st Street	2C w/ CLTL	15,000	9,800	C	0.65	8,000	9,115	F	1.14	-0.49	Encanto	N

**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
65		61st Street & Plaza Boulevard	2C w/ CLTL	15,000	8,400	C	0.56	15,000	6,555	B	0.44	0.12	Encanto	N
66	Cesar Chavez Parkway	Commercial Street & I-5 NB Ramps	2C MF	8,000	10,600	F	1.33	8,000	5,692	D	0.71	0.62	Southeastern	Y
67		I-5 NB & SR-75 On-Ramp/Logan Avenue	4S	30,000	17,300	C	0.58	30,000	13,771	B	0.46	0.12	Barrio Logan	N
68	25th Street	SR-94 WB Off-Ramp & SR-94 EB On-Ramp	2C w/ CLTL	15,000	18,900	F	1.26	15,000	12,970	D	0.86	0.40	Southeastern	Y
69		SR-94 EB On-Ramp & Market Street	2C w/ CLTL	15,000	20,000	F	1.33	15,000	10,914	D	0.73	0.60	Southeastern	Y
70		Market Street & Imperial Avenue	2C w/ CLTL	15,000	19,700	F	1.31	15,000	9,150	C	0.61	0.70	Southeastern	Y
71		Imperial Avenue & Commercial Street	2C w/ CLTL	15,000	12,700	D	0.85	8,000	5,703	B	0.71	0.14	Southeastern	N
72	28th Street	SR-94 WB Ramps & SR-94 EB Ramps	2C MF	8,000	11,300	F	1.41	8,000	10,183	F	1.27	0.14	Southeastern	Y
73		SR-94 EB Ramps & Market Street	2C MF	8,000	12,100	F	1.51	8,000	10,041	F	1.26	0.25	Southeastern	Y
74		Market Street & Imperial Avenue	2C MF	8,000	9,000	F	1.13	8,000	7,494	E	0.94	0.19	Southeastern	Y
75		Imperial Avenue & Commercial Street	2C MF	8,000	6,400	D	0.80	8,000	5,300	D	0.66	0.14	Southeastern	N
76		Commercial Street & Ocean View Boulevard	2C MF	8,000	7,200	E	0.90	8,000	4,965	C	0.62	0.28	Southeastern	Y
77		Ocean View Boulevard & National Avenue	2C MF	8,000	11,700	F	1.46	8,000	8,195	F	1.02	0.44	Southeastern	Y
78		National Avenue & Boston Avenue	2C w/ CLTL	15,000	27,800	F	1.85	15,000	14,165	E	0.94	0.91	Barrio Logan	Y
79	30th Street	E Street & Imperial Avenue	2C MF	8,000	8,200	F	1.03	8,000	4,945	C	0.62	0.41	Southeastern	Y
80		Imperial Avenue & Commercial Street	2C MF	8,000	5,100	D	0.64	8,000	2,993	B	0.37	0.27	Southeastern	N
81		Commercial Street & National Avenue	2C MF	8,000	6,000	D	0.75	8,000	4,826	C	0.60	0.15	Southeastern	N
82	Broadway/32nd Street	SR-94 WB & SR-94 EB On-Ramp / F Street	2C w/ CLTL	15,000	11,700	D	0.78	15,000	11,468	D	0.76	0.02	Southeastern	N
83	32nd Street	SR-94 EB On-Ramp/F Street & Market Street	2C MF	8,000	12,300	F	1.54	8,000	6,076	D	0.76	0.78	Southeastern	Y

**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
84		Market Street & Imperial Avenue	2C MF	8,000	9,100	F	1.14	8,000	5,116	D	0.64	0.50	Southeastern	Y
85		Imperial Avenue & Commercial Street	2C MF	8,000	6,300	D	0.79	8,000	3,134	B	0.39	0.40	Southeastern	N
86		Commercial Street & Ocean View Boulevard	2C MF	8,000	7,000	E	0.88	8,000	3,975	C	0.5	0.38	Southeastern	Y
87		Ocean View Boulevard & National Avenue	2C MF	8,000	7,200	E	0.90	8,000	4,442	C	0.56	0.34	Southeastern	Y
88		National Avenue & Boston Avenue	2C MF	8,000	9,500	F	1.19	8,000	5,420	D	0.68	0.51	Southeastern	Y
89	35th Street/Rigel Street	Ocean View Boulevard & Main Street	2C MF	8,000	11,200	F	1.40	8,000	7,520	E	0.94	0.46	Southeastern	Y
90	36th Street	Imperial Avenue & Ocean View Boulevard	2C MF	8,000	4,600	C	0.58	8,000	3,447	B	0.43	0.15	Southeastern	N
91		Ocean View Boulevard & Acacia Street	2C MF	8,000	4,600	C	0.58	8,000	3,410	B	0.43	0.15	Southeastern	N
92	38th Street	Ocean View Boulevard & Acacia Street	2C MF	8,000	3,900	C	0.49	8,000	3,585	C	0.45	0.04	Southeastern	N
93	Vesta Street	Acacia Street & Main Street	2C MF	8,000	6,300	D	0.79	8,000	3,970	C	0.50	0.29	Southeastern	N
94	40th Street	Imperial Avenue & Ocean View Boulevard	4C w/o CLTL	15,000	5,000	A	0.33	15,000	4,425	A	0.30	0.03	Southeastern	N
95		National Avenue & Division Street	2C MF	8,000	3,700	C	0.46	8,000	1,966	A	0.25	0.21	Southeastern	N
96	Boundary Street	Hilltop Drive & Market Street	2C MF	8,000	3,000	B	0.38	8,000	2,060	A	0.26	0.12	Southeastern	N
97	San Pasqual Drive	Imperial Avenue & Ocean View Boulevard	2C NF	10,000	6,500	D	0.65	10,000	5,479	B	0.55	0.10	Southeastern	N
98		Ocean View Boulevard & Logan Avenue	2C NF	10,000	11,600	F	1.16	10,000	5,535	C	0.55	0.61	Southeastern	Y
99	43rd Street	Logan Avenue & Newton Avenue	2C w/ CLTL	15,000	14,900	F	0.99	15,000	13,301	E	0.89	0.10	Southeastern	Y
100		Newton Avenue & Beta Street	4C w/o CLTL	15,000	16,500	F	1.10	22,500	12,835	C	0.57	0.53	Southeastern	Y

**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
101		Beta Street & Delta Street	2C w/ CLTL	15,000	25,800	F	1.72	15,000	17,249	F	1.15	0.57	Southeastern	Y
102		Delta Street & Division Street	3C w/ CLTL	22,500	21,400	E	0.95	22,500	15,360	D	0.68	0.03	Southeastern	Y
103	Highland Avenue	Division Street & 4th Street	4S	30,000	21,100	D	0.7	30,000	12,990	B	0.43	0.27	National City	N
104	45th Street	Imperial Avenue & Logan Avenue	2C MF	8,000	3,400	A	0.43	8,000	1,955	A	0.24	0.19	Southeastern	N
105	Mallard Street	Federal Boulevard & 69th Street	2C Com	8,000	8,300	F	1.04	8,000	7,510	E	0.94	0.10	Encanto	Y
106	Federal Blvd	60th Street & Mallard Street	4C w/ CLTL	30,000	17,500	C	0.58	30,000	17,190	C	0.57	0.01	Encanto	N
107		Mallard Street & MacArthur Drive	3C w/ CLTL	15,000	11,200	D	0.75	22,500	10,880	C	0.48	0.27	Encanto	N
108	Tooley Street	60th Street & Paradise Street	2C MF	8,000	600	A	0.08	8,000	463	A	0.06	0.02	Encanto	N
109	Roswell Street	51st Street & Old Memory Lane	2C MF	8,000	3,000	C	0.38	8,000	1,015	A	0.13	0.25	Encanto	N
110	Old Memory Lane	Roswell Street & 60th Street	2C MF	8,000	1,500	A	0.19	8,000	1,303	A	0.16	0.03	Encanto	N
111	Radio Drive	60th Street & Mallard Street	2C MF	8,000	1,300	A	0.16	8,000	460	A	0.06	0.10	Encanto	N
112	Klauber Avenue	Broadway & 69th Street	2C MF	8,000	1,900	A	0.24	8,000	919	A	0.11	0.13	Encanto	N
113	Broadway	60th Street & Madera Street	2C MF	8,000	4,800	C	0.60	8,000	2,600	B	0.33	0.27	Encanto	N
114	Lisbon Street	Imperial Avenue & 71st Street	2C w/ CLTL	15,000	15,500	F	1.03	15,000	8,522	C	0.57	0.46	Encanto (Skyline/Paradise Hills)	Y
115	Churchward Street/58th Street	Euclid Avenue & Skyline Drive	2C MF	8,000	5,100	D	0.64	8,000	2,007	A	0.25	0.39	Encanto	N

Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
116	Skyline Drive	58th Street & Valencia Parkway	2C w/ CLTL	15,000	9,600	C	0.64	15,000	6,760	B	0.45	0.19	Encanto	N
117		Valencia Parkway & 61st Street	2C w/ CLTL	15,000	16,400	F	1.09	15,000	10,910	D	0.73	0.36	Encanto	Y
118		61st Street & Omeara Street	2C w/ CLTL	15,000	13,300	E	0.89	15,000	11,474	D	0.76	0.13	Encanto	Y
119		Omeara Street & Woodman Street	2C w/ CLTL	15,000	12,900	D	0.86	15,000	11,700	D	0.78	0.08	Encanto	N
120		Woodman Street & 69th Street	2C w/ CLTL	15,000	11,900	D	0.79	30,000	11,665	B	0.39	0.40	Skyline/ Paradise Hills	N
121	Olvera Avenue/58th Street	Euclid Avenue & Skyline Drive	2C MF	8,000	7,900	E	0.99	8,000	5,190	D	0.65	0.34	Encanto	Y
122	Plaza Boulevard	Paradise Valley Road & Division Street	4C	15,000	9,700	C	0.65	15,000	4,700	A	0.31	0.34	Encanto	N
123		Division Street & Woodman Street	2C NF	10,000	9,800	E	0.98	10,000	6,190	B	0.62	0.36	Encanto	Y
124	47th Street	SR-94 EB On-Ramp & Market Street	2C w/ CLTL	15,000	21,700	F	1.45	30,000	12,263	B	0.41	1.04	Encanto	Y
125		Market Street & Imperial Avenue	2C w/ CLTL	15,000	20,500	F	1.37	15,000	10,145	D	0.68	0.69	Encanto	Y
126		Imperial Avenue & Logan Avenue	2C w/ CLTL	15,000	17,200	F	1.15	30,000	10,870	B	0.36	0.79	Encanto	Y
127		Logan Avenue & I-805 NB Ramps	2C w/ CLTL	15,000	17,600	F	1.17	22,500	9,465	B	0.42	0.75	Encanto	Y
128		I-805 NB Ramps & I-805 SB Ramps	4M w/ RM	40,000	21,600	C	0.54	40,000	15,469	B	0.39	0.15	Encanto/ National City	N
129	47th Street / Palm Avenue	I-805 SB Ramps & Division Street	4M w/ RM	40,000	28,200	C	0.71	40,000	21,748	C	0.54	0.17	National City	N
130	Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	4M w/ RM	40,000	38,500	E	0.96	40,000	28,950	C	0.72	0.24	Encanto	Y
131		SR-94 EB Ramps & Market Street	4M w/ RM	40,000	38,200	E	0.96	30,000	25,364	E	0.85	0.11	Encanto	Y
132		Market Street & Imperial Avenue	4M w/ RM	40,000	33,200	D	0.83	30,000	20,933	D	0.70	0.13	Encanto	N
133		Imperial Avenue & Logan Avenue	4C w/ CLTL	30,000	14,900	C	0.50	30,000	11,000	B	0.37	0.13	Encanto	N

Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
134		Logan Avenue & Division Street	4C w/ CLTL	30,000	14,700	C	0.49	40,000	10,655	A	0.27	0.22	Encanto/ National City	N
135	51st Street	Market Street & Roswell Street	2C NF	10,000	4,000	A	0.40	10,000	2,252	A	0.23	0.17	Encanto	N
136	San Jacinto Drive	Imperial Avenue & Olvera Avenue	2C MF	8,000	4,200	C	0.53	8,000	1,848	A	0.23	0.30	Encanto	N
137	Bayview Heights Way	SR-94 WB Ramps & SR-94 EB Ramps	2C NF	10,000	17,300	F	1.73	10,000	11,160	F	1.12	0.61	Encanto	Y
138	Kelton Road	SR-94 EB Ramps & Alvin Street	2C MF	8,000	14,500	F	1.81	8,000	3,840	D	0.48	1.33	Encanto	Y
139	Alvin Street	Kelton Road & Pitta Street	2C MF	8,000	9,900	F	1.24	8,000	1,164	A	0.15	1.09	Encanto	Y
140	Pitta Street	Alvin Street & Market Street	2C MF	8,000	10,000	F	1.25	8,000	3,013	B	0.38	0.87	Encanto	Y
141	Merlin Drive	Broadway & Imperial Avenue	2C MF	8,000	4,700	C	0.59	8,000	4,455	C	0.56	0.03	Encanto	N
142	Valencia Parkway	Imperial Avenue & Skyline Drive	4M w/ RM	40,000	9,300	A	0.23	40,000	7,059	A	0.18	0.05	Encanto	N
143		Skyline Drive & Cervantes Avenue	4C	15,000	5,600	B	0.37	15,000	3,645	A	0.24	0.13	Encanto	N
144		Cervantes Avenue & Wesmead Street	4C	15,000	6,200	B	0.41	15,000	4,443	A	0.3	0.11	Encanto	N
145		Wesmead Street & Division Street	2C MF	8,000	6,200	D	0.78	8,000	4,399	C	0.55	0.23	Encanto	N
146	60th Street	Federal Boulevard & Imperial Avenue	2C MF	8,000	13,000	F	1.63	8,000	5,050	D	0.63	1.00	Encanto	Y
147	61st Street	Imperial Avenue & Division Street	2C MF	8,000	8,900	F	1.11	8,000	4,915	C	0.61	0.50	Encanto	Y
148	Winnett Street	Federal Boulevard & Radio Drive	2C MF	8,000	3,500	B	0.44	8,000	2,649	B	0.33	0.11	Encanto	N
149	Paradise Street	Mallard Street & Radio Drive	2C MF	8,000	900	A	0.11	8,000	715	A	0.09	0.02	Encanto	N
150	Madera Street	Massachusetts Avenue & 69th Street	2C MF	8,000	3,600	B	0.45	8,000	3,469	B	0.43	0.02	Lemon Grove	N

**Table 5-6  
Roadway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

#	Roadway	Segment	High Density Alternative					Existing Conditions				Δ V/C	Community	SI?
			Functional Classification	Capacity (LOS E)	ADT	LOS	V/C	Capacity (LOS E)	ADT	LOS	V/C			
151	Madera Street/66th Street	69th Street & Akins Avenue	2C MF	8,000	4,400	C	0.55	8,000	3,150	B	0.39	0.16	Encanto	N
152	Woodman Street	Imperial Avenue & Skyline Drive	2C Com	8,000	10,900	F	1.36	8,000	6,951	E	0.87	0.49	Encanto	Y
153		Skyline Drive & Plaza Boulevard	4M w/ RM	40,000	13,100	A	0.33	40,000	9,290	A	0.23	0.10	Encanto	N
154		Plaza Blvd & Paradise Valley Road	4M w/ RM	40,000	17,600	B	0.44	40,000	16,730	B	0.42	0.02	Encanto (Skyline/Paradise Hills)	N
155	69th Street	San Miguel Avenue & Mallard Street	2C MF	8,000	5,700	D	0.71	8,000	5,389	D	0.67	0.04	Lemon Grove	N
156		Mallard Street & Imperial Avenue	2C MF	8,000	4,700	C	0.59	8,000	4,000	C	0.50	0.09	Encanto	N
157		Imperial Avenue & Skyline Drive	2C MF	8,000	4,700	C	0.59	8,000	3,363	B	0.42	0.17	Encanto (Skyline/Paradise Hills)	N

Source: Chen Ryan Associates; June 2015

Notes:

- SI = Significant Impact?
- RM = Raised Median
- 4M - Major Arterial (4-lane, divided)
- 4-S/4C + CLTL = Secondary Arterial / Collector (4-lane w/ center lane)
- 4C = Collector (4-lane w/o center lane)
- 2C + CLTL = Collector (2-lane w/ continuous left-turn lane)
- 2C NF = Collector (2-lane no fronting property)
- 2C Com = Collector (2-lane w/ commercial fronting)
- 2C MF = Collector (2-lane multi-family)



# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

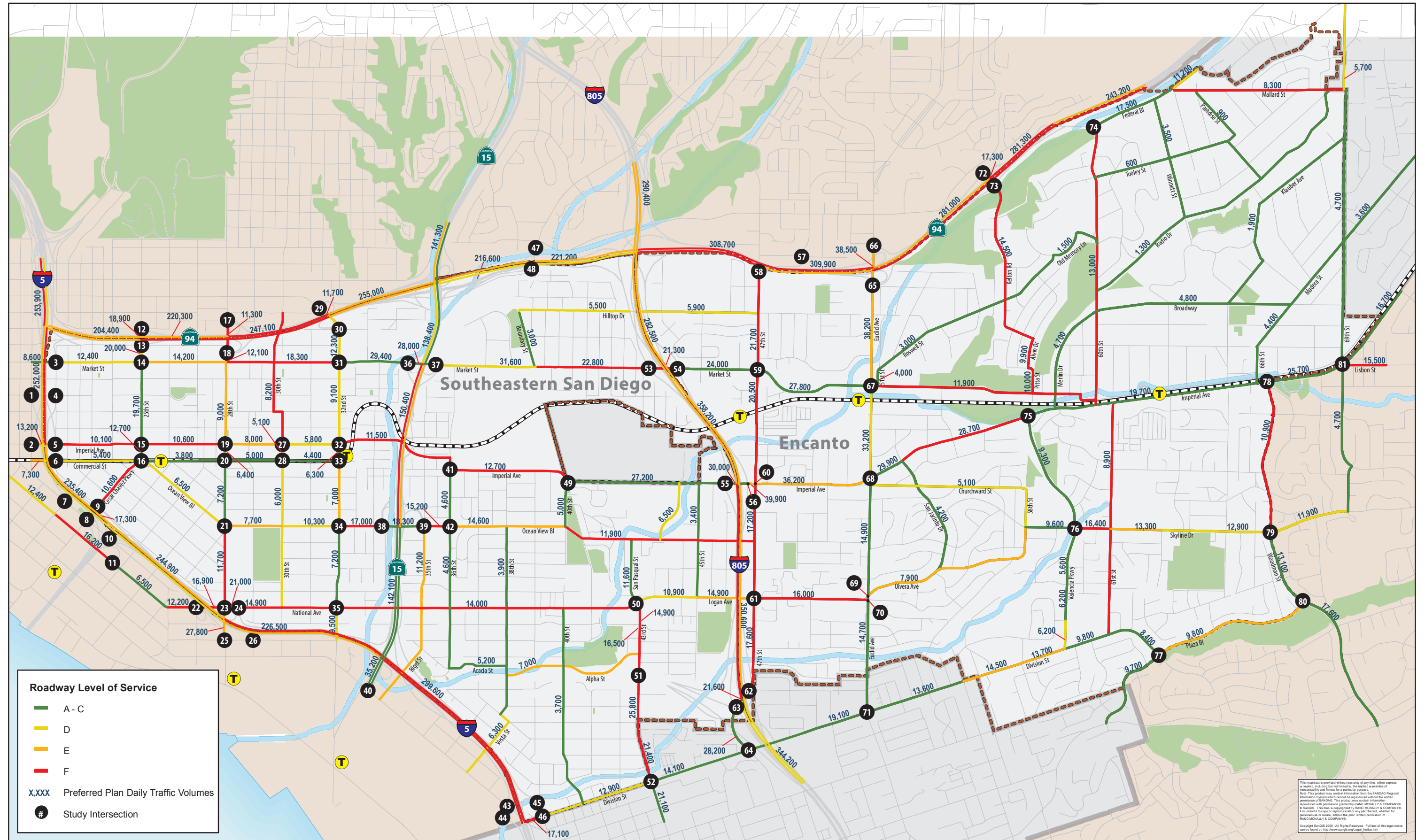


Figure 5-3: High Density Alternative Roadway Traffic Volumes and Level of Service

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*Southeastern San Diego (continued)*

77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue (LOS F);
79. 30<sup>th</sup> Street, between E Street and Imperial Avenue (LOS E);
83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street (LOS F);
84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue (LOS F);
86. 32<sup>nd</sup> Street, between Commercial Street and Ocean View Boulevard (LOS E);
87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue (LOS E);
88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue (LOS F);
89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street (LOS F);
99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue (LOS E);
100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street (LOS F);
101. 43<sup>rd</sup> Street, between Beta Street and Delta Street (LOS F)
102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street (LOS E); and
105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street (LOS F).

*Encanto Neighborhoods*

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street (LOS F);
24. Imperial Avenue, between I-805 NB Ramps and 47<sup>th</sup> Street (LOS E);
25. Imperial Avenue, between 47<sup>th</sup> Street and Euclid Avenue (LOS E);
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway (LOS F);
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue (LOS F);
62. Division Street, between Harbison Avenue and 58<sup>th</sup> Street (LOS E);
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway (LOS E);
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street (LOS F);
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street (LOS F);
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street (LOS E);
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive (LOS E);
123. Plaza Boulevard, between Division Street and Woodman Street (LOS E);
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street (LOS F);
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue (LOS F);
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue (LOS F);
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps (LOS F);
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps (LOS F);
138. Kelton Road, between SR-94 EB Ramps and Alvin Street (LOS F);
139. Alvin Street, between Kelton Road and Pitta Street (LOS F);
140. Pitta Street, between Alvin Street and Market Street (LOS F);
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue (LOS F);
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street (LOS E); and
152. Woodman Street, between Imperial Avenue and Skyline Drive (LOS F).

*Southeastern San Diego & Encanto Neighborhoods*

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps (LOS F);
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street (LOS F); and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street (LOS E).

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### Sphere of Influence

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street (LOS E);
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp (LOS F);
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street (LOS F); and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue (LOS F).

Based on the criteria documented in Chapter 2, the High Density Alternative would have a significant impact to all roadway segments listed above, with the exception of Division Street between Harbison Avenue and 58<sup>th</sup> Street.

#### **5.2.4 Freeway/State Highway Segment Analysis**

Similar to the Preferred Plan, a freeway analysis was also conducted for the High Density Alternative. Freeway geometric configurations were assumed to be the same as the Preferred Plan.

**Table 5-7** displays freeway segment LOS analysis results for the key freeway segments in the vicinity of the project study area under the High Density Alternative.

As shown in the table, under buildout of the High Density Alternative, the following twenty-four (24) freeway segments within the project study area are anticipated to operate at less than desirable LOS E or F:

- I-5, between 17th Street and SR-94 – (SB : LOS F);
- I-5, between SR-94 and Imperial Avenue – (NB: LOS F / SB: LOS E);
- I-5, between Imperial Avenue and SR-75 – (NB: LOS E);
- I-5, between SR-75 and 28th Street – (NB: LOS E);
- I-5, between 28th Street and I-15 – (NB: LOS F / SB: LOS E);
- I-5, between I-15 and Main Street – (NB: LOS F / SB: LOS F);
- I-15, between I-805 and SR-94 – (SB: LOS E);
- I-15, between Market Street and Ocean View Boulevard – (NB: LOS E / SB: LOS F);
- I-805, between Home Avenue and SR-94 – (NB: LOS E / SB: LOS E);
- I-805, between SR-94 and Market Street – (NB: LOS E / SB: LOS E);
- I-805, between Market Street and Imperial Avenue – (NB: LOS E / SB: LOS E);
- I-805, between Imperial Avenue and 43rd Street – (NB: LOS E / SB: LOS F);
- SR-94, between 17th Street and 25th Street – (EB: LOS E / WB: LOS E);
- SR-94, between 25th Street and 28th Street – (EB: LOS F / WB: LOS E);
- SR-94, between 28th Street and 30th Street – (EB: LOS F / WB: LOS F);
- SR-94, between 30th Street and I-15 – (EB: LOS E / WB: LOS E);
- SR-94, between I-15 and Home Avenue – (WB: LOS E);
- SR-94, between Home Avenue and I-805 – (WB: LOS E);
- SR-94, between I-805 and 47th Street – (EB: LOS F / WB: LOS E);
- SR-94, between 47th Street and Euclid Avenue (EB: LOS E / WB: LOS F);
- SR-94, between Euclid Avenue and Kelton Road (EB: LOS F / WB: LOS E);

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- SR-94, between Kelton Road and Federal Boulevard – (EB: LOS F / WB: LOS F);
  - SR-94, between Federal Boulevard and College Grove Way – (EB: LOS F / WB: LOS E);  
and
  - SR-94, between College Grove Way and College Avenue – (EB: LOS F / WB: LOS F).

Based on the criteria documented in Chapter 2, the High Density Alternative would have a significant impacts to all of the freeway segments listed above with the following exceptions:

- I-805, between Home Avenue and SR-94; and
- I-805, between SR-94 and Market Street.

**Table 5-7  
Freeway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
I-5	17th Street & SR-94	NB	128,300	4M+2A	12,220	11,300	0.92	D	201,000	4M+2A	12,220	9,600	0.79	C	0.13	No
		SB	125,600	4M	9,400	11,000	1.17	F0		4M	9,400	9,400	1.00	E	0.17	Yes
	SR-94 & Imperial Avenue	NB	135,900	4M+1A	10,810	11,600	1.07	F0	208,000	4M+1A	10,810	11,100	1.03	F0	0.04	Yes
		SB	116,100	4M+1A	10,810	10,200	0.94	E		4M+1A	10,810	9,700	0.90	D	0.04	Yes
	Imperial Avenue & SR-75	NB	122,100	4M+1A	10,810	10,500	0.97	E	161,000	4M+1A	10,810	8,600	0.80	D	0.17	Yes
		SB	113,300	4M+1A	10,810	9,700	0.90	D		4M+1A	10,810	8,000	0.74	C	0.16	No
	SR-75 & 28th Street	NB	134,600	4M+2A	12,220	11,900	0.97	E	159,000	4M+2A	12,220	9,900	0.81	D	0.16	Yes
		SB	110,300	4M+1A	10,810	9,500	0.88	D		4M+1A	10,810	7,900	0.73	C	0.15	No
	28th Street & I-15	NB	124,500	4M	9,400	11,000	1.17	F0	155,000	4M	9,400	9,600	1.02	F0	0.15	Yes
		SB	102,000	4M	9,400	8,800	0.94	E		4M	9,400	7,700	0.82	D	0.12	Yes
I-15 & Main Street	NB	155,300	4M+2A	12,220	13,700	1.12	F0	191,000	4M+2A	12,220	11,900	0.97	E	0.15	Yes	
	SB	144,300	5M	11,750	13,200	1.12	F0		5M	11,750	11,400	0.97	E	0.15	Yes	
I-15	I-805 & SR-94	NB	75,800	3M+1A	8,460	6,400	0.76	C	109,000	3M+1A	8,460	5,500	0.65	C	0.11	No
			900	1 HOV	2,350	100	0.04	A		-	-	-	-	-	0.00	No
		SB	64,100	2M+1A	6,110	5,700	0.93	E		2M+1A	6,110	4,900	0.80	D	0.13	Yes
			500	1 HOV	2,350	0.00	0.00	A		-	-	-	-	-	0.00	No
	SR-94 & Market Street	NB	71,800	3M+1A	8,460	6,100	0.72	C	115,000	3M+1A	8,460	5,800	0.69	C	0.03	No
		SB	66,600	3M+1A	8,460	6,800	0.80	D		3M+1A	8,460	6,500	0.77	C	0.03	No



**Table 5-7  
Freeway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
I-15	Market Street & Ocean View Boulevard	NB	79,100	3M	7,050	6,700	0.95	E	107,000	3M	7,050	5,600	0.79	C	0.16	Yes
		SB	71,300	3M	7,050	7,200	1.02	F0		3M	7,050	6,000	0.85	D	0.17	Yes
	Ocean View Boulevard & I-5	NB	74,700	3M+1A	8,460	5,500	0.65	C	48,000	3M+1A	8,460	2,200	0.26	A	0.39	No
		SB	67,400	4M+1A	10,810	5,500	0.51	B		4M+1A	10,810	2,200	0.20	A	0.31	No
	I-5 & Norman Scott Road	NB	18,600	2M	4,700	1,400	0.30	A	16,500	2M	4,700	700	0.15	A	0.15	No
		SB	16,600	2M	4,700	1,300	0.28	A		2M	4,700	700	0.15	A	0.13	No
I-805	Home Avenue & SR-94	NB	124,900	4M	9,400	9,200	0.98	E	217,000	4M	9,400	10,400	1.11	F0	-0.13	No
			29,600	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	No
		SB	112,800	4M	9,400	9,300	0.99	E		4M	9,400	10,400	1.11	F0	-0.12	No
			23,100	1 HOV	2,350	1,900	0.81	D		-	-	-	-	-	0.00	No
	SR-94 & Market Street	NB	121,600	4M	9,400	8,900	0.95	E	216,000	4M	9,400	10,200	1.09	F0	-0.14	No
			27,500	1 HOV	2,350	2,000	0.85	D		-	-	-	-	-	0.00	No
		SB	110,100	4M	9,400	9,000	0.96	E		4M	9,400	10,400	1.11	F0	-0.15	No
			23,300	1 HOV	2,350	1,900	0.81	D		-	-	-	-	-	0.00	No

**Table 5-7  
Freeway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
I-805	Market Street & Imperial Avenue	NB	157,600	4M+2A	12,220	11,500	0.94	E	227,000	4M+2A	12,220	10,800	0.88	D	0.06	Yes
			29,400	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	Yes
		SB	142,700	4M+2A	12,220	11,700	0.96	E		4M+2A	12,220	10,900	0.89	D	0.07	Yes
			28,500	1 HOV	2,350	2,300	0.98	E		-	-	-	-	-	0.00	Yes
	Imperial Avenue & 43rd Street	NB	150,500	5M	11,750	11,000	0.94	E	210,000	5M	11,750	9,900	0.84	D	0.10	Yes
			30,600	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	No
		SB	141,200	4M+1A	10,810	11,100	1.03	F0		4M+1A	10,810	10,100	0.93	E	0.10	Yes
			28,300	1 HOV	2,350	2,200	0.94	E		-	-	-	-	-	0.00	Yes
	43rd Street & Plaza Boulevard	NB	160,200	4M+2A	12,220	10,100	0.83	D	196,000	4M+2A	12,220	8,900	0.73	C	0.10	No
			28,300	1 HOV	2,350	1,800	0.77	C		-	-	-	-	-	0.00	No
		SB	132,200	5M	11,750	10,500	0.89	D		5M	11,750	9,300	0.79	C	0.10	No
			23,500	1 HOV	2,350	1,900	0.81	D		-	-	-	-	-	0.00	No
SR-94	17th Street & 25th Street	EB	95,000	4M	9,400	9,300	0.99	E	110,000	4M	9,400	7,500	0.80	D	0.19	Yes
		WB	106,100	3M+1A	8,460	8,500	1.00	E		3M+1A	8,460	6,900	0.82	D	0.18	Yes
			3,300	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
	25th Street & 28th Street	EB	100,900	4M	9,400	9,900	1.05	F0	124,000	4M	9,400	8,300	0.88	D	0.17	Yes
			6,200	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
		WB	109,900	4M	9,400	8,800	0.94	E		4M	9,400	7,400	0.79	C	0.15	Yes
			3,300	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No



**Table 5-7  
Freeway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
SR-94	28th Street & 30th Street	EB	112,800	4M	9,400	10,300	1.10	F0	132,000	4M	9,400	8,100	0.86	D	0.24	Yes
			7,100	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
		WB	124,000	4M	9,400	9,900	1.05	F0		4M	9,400	7,900	0.84	D	0.21	Yes
			3,200	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
	30th Street & I-15	EB	116,600	4M+1A	10,810	10,600	0.98	E	146,000	4M+1A	10,810	9,000	0.83	D	0.15	Yes
			7,100	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
		WB	128,100	4M+1A	10,810	10,300	0.95	E		4M+1A	10,810	8,700	0.80	D	0.15	Yes
			3,200	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
	I-15 & Home Avenue	EB	99,500	4M+1A	10,810	9,100	0.84	D	140,000	4M+1A	10,810	8,600	0.80	D	0.04	No
			5,600	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	109,400	4M	9,400	8,800	0.94	E		4M	9,400	8,300	0.88	D	0.06	Yes
			2,100	1 HOV	2,350	200	0.09	A		-	-	-	-	-	0.00	No
	Home Avenue & I-805	EB	101,600	4M+1A	10,810	9,200	0.85	D	128,000	4M+1A	10,810	7,900	0.73	C	0.12	No
			5,900	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
	Home Avenue & I-805	WB	111,600	4M	9,400	8,900	0.95	E		4M	9,400	7,600	0.81	D	0.14	Yes
			2,100	1 HOV	2,350	200	0.09	A		-	-	-	-	-	0.00	No
	I-805 & 47th Street	EB	147,100	5M	11,750	13,400	1.14	F0	172,000	5M	11,750	10,600	0.90	D	0.24	Yes
		WB	161,600	4M+1A	10,810	12,900	1.19	F0		4M+1A	10,810	10,200	0.94	E	0.25	Yes

**Table 5-7  
Freeway Segment Level of Service Results  
High Density Alternative vs. Existing Conditions**

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
SR-94	47th Street & Euclid Avenue	EB	141,200	5M+1A	13,160	12,800	0.97	E	171,000	5M+1A	13,160	10,500	0.80	D	0.17	Yes
			5,900	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	155,200	4M+1A	10,810	12,400	1.15	F0		4M+1A	10,810	10,200	0.94	E	0.21	Yes
			7,600	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
	Euclid Avenue & Kelton Road	EB	132,000	5M	11,750	12,000	1.02	F0	156,000	5M	11,750	9,600	0.82	D	0.20	Yes
			5,200	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
		WB	136,500	4M+1A	10,810	10,500	0.97	E		4M+1A	10,810	8,400	0.78	C	0.19	Yes
			7,300	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No
	Kelton Road & Federal Boulevard	EB	129,800	4M+1A	10,810	11,700	1.08	F0	161,000	4M+1A	10,810	9,300	0.86	D	0.22	Yes
			3,700	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	141,800	4M+1A	10,810	10,900	1.01	F0		4M+1A	10,810	8,700	0.80	D	0.21	Yes
			6,000	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No
	Federal Boulevard & College Grove Way	EB	111,000	4M	9,400	10,000	1.06	F0	145,000	4M	9,400	8,400	0.89	D	0.17	Yes
			3,800	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	121,200	4M	9,400	9,400	1.00	E		4M	9,400	7,800	0.83	D	0.17	Yes
			7,200	1 HOV	2,350	600	0.26	A		-	-	-	-	-	0.00	No

Table 5-7  
 Freeway Segment Level of Service Results  
 High Density Alternative vs. Existing Conditions

Freeway / State Highway	Segment	Direction	HIGH Density Alternative						Existing Conditions						Change in V/C	SI?
			ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS	ADT	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS		
SR-94	College Grove Way & College Avenue	EB	114,700	4M	9,400	10,300	1.10	<b>F0</b>	145,000	4M	9,400	8,400	0.89	D	0.21	Yes
			3,800	1 HOV	2,350	300	0.13	A		-	-	-	-	-	0.00	No
		WB	125,800	4M	9,400	10,400	1.11	<b>F0</b>		4M	9,400	8,400	0.89	D	0.22	Yes
			5,500	1 HOV	2,350	500	0.21	A		-	-	-	-	-	0.00	No

Source: Chen Ryan Associates; June 2015

Notes:

Bold letter indicates unacceptable LOS E or F.

M = Mainline. A = Auxiliary Lane. HOV = High Occupancy Vehicle Only

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## 5.2.5 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted by the Southeastern San Diego and Encanto Neighborhoods Community Plan Update under the High Density Alternative.

### Roadway Mitigation Measure

#### Southeastern San Diego

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
10. Market Street, between Boundary Street and I-805 SB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 3-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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57. Division Street, between Main Street and Osborn Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps - Provide additional right-of-way and widen to provide a 2-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

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79. 30<sup>th</sup> Street, between E Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  86. 32<sup>nd</sup> Street, between Commercial Street and Ocean View Boulevard - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the High Density Alternative, to this roadway segment would be fully mitigated with the implementation of this measure.
  87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street - Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.



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102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
24. Imperial Avenue, between I-805 NB Ramps and 47th Street - Provide additional right-of-way and widen the roadway to a 6-lane Major Arterial. The significant traffic impact, associated with the High Density Alternative, to this roadway segment would be fully mitigated with the implementation of this measure.
25. Imperial Avenue, between 47th Street and Euclid Avenue - Provide additional right-of-way and widen the roadway to a 6-lane Major Arterial. The significant traffic impact, associated with the High Density Alternative, to this roadway segment would be fully mitigated with the implementation of this measure.
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway – Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The

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significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
123. Plaza Boulevard, between Division Street and Woodman Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
138. Kelton Road, between SR-94 EB Ramps and Alvin Street – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
138. Alvin Street, between Kelton Road and Pitta Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated

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with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

140. Pitta Street, between Alvin Street and Market Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue – Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
152. Woodman Street, between Imperial Avenue and Skyline Drive – Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### *Southeastern San Diego & Encanto Neighborhoods*

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

#### *Sphere of Influence*

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp - Provide additional right-of-way and widen to provide a continuous left-turn lane. The significant traffic

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impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street - Provide additional right-of-way and widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue - Provide additional right-of-way and widen the roadway to a 4-lane Major Arterial with a raised median. The significant traffic impact, associated with the Preferred Plan, to this roadway segment would be fully mitigated with the implementation of this measure.

### **Freeway Mitigation Measures:**

**I-5, between 17<sup>th</sup> Street and SR-94; I-5, between SR-94 and Imperial Avenue; I-5, between Imperial Avenue and SR-75; I-5, between SR-75 and 28<sup>th</sup> Street; I-5, between 28<sup>th</sup> Street and I-15; and I-5, between I-15 and Main Street** – The SANDAG 2050 Revenue Constrained RTP includes operational improvements along I-5 between 17<sup>th</sup> Street and Main Street. These improvements are expected to be built by Year 2050. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**I-15, between I-805 and SR-94; I-15, between Market Street and Ocean View Boulevard** - The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along I-15 between I-805 and Ocean View Boulevard. These improvements are expected to be built by Year 2035. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**I-805, between Market Street and Imperial Avenue; and I-805, between Imperial Avenue and 43<sup>rd</sup> Street** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed

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lanes along I-805 between Market Street and 43<sup>rd</sup> Street. These improvements are expected to be built by Year 2030. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**SR-94, between 17<sup>th</sup> Street and 25<sup>th</sup> Street; SR-94, between 25<sup>th</sup> Street and 28<sup>th</sup> Street; SR-94, between 28<sup>th</sup> Street and 30<sup>th</sup> Street; SR-94, between 30<sup>th</sup> Street and I-15; SR-94, between I-15 and Home Avenue; and SR-94, between Home Avenue and I-805** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along SR-94 between 17<sup>th</sup> Street and I-805. These improvements are expected to be built by Year 2020. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs' significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

**SR-94, between I-805 and 47<sup>th</sup> Street; SR-94, between 47<sup>th</sup> Street and Euclid Avenue; SR-94, between Euclid Avenue and Kelton Road; SR-94, between Kelton Road and Federal Boulevard; SR-94, between Federal Boulevard and College Grove Way; and SR-94, between College Grove Way and College Avenue** – The SANDAG 2050 Revenue Constrained RTP includes construction of managed lanes along SR-94 between I-805 and College Avenue. These improvements are expected to be built by Year 2040. There is some uncertainty related to the actual developments and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding planned by SANDAG and other funding sources consistent with SANDAG Revenue Constrained RTP. The SESD and Encanto Neighborhoods CPUs significant traffic impact to this freeway segment would remain significant unmitigated at the program level.

### 5.3 Lower-Density Alternative

This chapter provides a trip generation comparison of the buildout of the Lower-Density Alternative to the Existing Conditions. The Lower-Density Alternative land uses were developed by the project consultant team led by Dyett & Bhatia with collaboration from City staff and community members.

#### 5.3.1 Trip Generation

Trip generation analyses were conducted to compare the Lower-Density Alternative and Existing Conditions. Trip generation rates for various land use categories were obtained from the *City of San Diego Trip Generation Manual* (May 2003).

**Table 5-8** and **Table 5-9** compares both the land use quantity and ADT by land use categories under the Lower-Density Alternative and Existing Conditions, for the Southeastern San Diego and Encanto Neighborhoods communities, respectively.

Table 5-8  
Land Use Comparison – Southeastern San Diego  
Lower-Density Alternative vs. Existing Conditions

Land Use	Lower-Density Alternative		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Arterial Commercial	1,472.6 ksf	58,899	849.0 ksf	33,952	623.6 ksf	24,947
Automobile Dealership	0.1 Acres	36	0.1 Acres	36	0.0 Acres	0
Automobile Parts Sale	5.7 ksf	356	5.7 ksf	356	0.0 ksf	0
Automobile Repair Shop	42.7 ksf	855	42.7 ksf	855	0.0 ksf	0
Automobile Tire Store	7.6 ksf	190	9.2 ksf	231	-1.6 ksf	-41
Clinic (Medical Office)	188.5 ksf	9,424	188.5 ksf	9,424	0.0 ksf	0
Communications and Utilities	19.1 Acres	0	21.9 Acres	0	-2.9 Acres	0
Community Shopping Center (100,000 SF or more)	799.9 ksf	55,994	698.2 ksf	48,871	101.8 ksf	7,123
Convenience Market Chain (Open Up to 16 Hours Per Day)	40.3 ksf	20,150	40.3 ksf	20,150	0.0 ksf	0
Day Care Center	109 child	545	0 child	0	109 child	545
Fire/Police Station	27.7 ksf	830	27.7 ksf	830	0.0 ksf	0
Government Office/Civic Center	52.4 ksf	1,573	52.4 ksf	1,573	0.0 ksf	0
Hotel (Low-Rise) (Motel)	91 Rooms	819	91 Rooms	819	0 Rooms	0
Industrial Park	113.5 ksf	1,703	0.0 ksf	0	113.5 ksf	1,703
Junior High School or Middle School	1,454 Students	2,036	1,454 Students	2,036	0 Students	0
Light Industry - General	2,147.1 ksf	32,208	1,808.2 ksf	27,125	338.9 ksf	5,083

Table 5-8  
Land Use Comparison – Southeastern San Diego  
Lower-Density Alternative vs. Existing Conditions

Land Use	Lower-Density Alternative		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
MF Residential less or equal 20 DU/acre	4,342 DU	34,736	3,963 DU	31,704	379 DU	3,032
MF Residential over 20 DU/acre	7,308 DU	43,848	5,434 DU	32,604	1,874 DU	11,244
Neighborhood Shopping Center (30,000 SF or more)	30.9 ksf	3,709	48.1 ksf	5,772	-17.2 ksf	-2,063
Office (Low-Rise - 1 ksf to 5 ksf)	11.6 ksf	475	18.7 ksf	767	-7.1 ksf	-292
Office (Low-Rise - 5 ksf to 10 ksf)	30.2 ksf	1,026	20.9 ksf	710	9.3 ksf	316
Office (Low-Rise - 50 ksf to 55 ksf)	97.8 ksf	1,957	97.8 ksf	1,957	0.0 ksf	0
Office (Low-Rise - 125138 ksf)	125.1 ksf	2,002	0.0 ksf	0	125.1 ksf	2,002
Open Space Park or Preserve	35.2 Acres	177	36.2 Acres	182	-0.9 Acres	-5
Other Health Care	29.8 ksf	1,488	29.8 ksf	1,488	0.0 ksf	0
Other Public Services	23.0 ksf	230	28.5 ksf	285	-5.5 ksf	-55
Other Recreation - High (Developed Park)	6.0 Acres	299	6.0 Acres	299	0.0 Acres	0
Other Retail Trade and Strip Commercial	12.6 ksf	505	13.8 ksf	553	-1.2 ksf	-48
Other School	36.1 ksf	650	36.1 ksf	650	0.0 ksf	0
Other University or College (Community College)	7,667 Students	12,267	7,667 Students	12,267	0 Students	0
Park - Active	87.4 Acres	4,369	72.2 Acres	3,609	15.2 Acres	760
Post Office	5.8 ksf	1,170	5.8 ksf	1,170	0.0 ksf	0
Public/Community Meeting Room Facility (Other Public Services)	9.9 ksf	297	9.9 ksf	297	0.0 ksf	0
Railroad Right of Way	10.0 Acres	0	11.9 Acres	0	-1.9 Acres	0
Religious Facility (without day care)	636.4 ksf	3,179	628.0 ksf	3,137	8.4 ksf	42
Restaurant (High Turnover sit-down)	12.5 ksf	1,620	12.5 ksf	1,620	0.0 ksf	0
Scrap Yards/Auto Dismantling/Landfill	0.0 Acres	0	6.5 Acres	39	-6.5 Acres	-39
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	8 station	1,240	8 station	1,240	0 station	0
Service Station (with food mart)	12 station	1,800	12 station	1,800	0 station	0



**Table 5-8**  
**Land Use Comparison – Southeastern San Diego**  
**Lower-Density Alternative vs. Existing Conditions**

Land Use	Lower-Density Alternative		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Single Family Detached	4,467 DU	40,203	4,360 DU	39,240	107 DU	963
Single Family Multiple-Units	1,304 DU	11,736	1,271 DU	11,439	33 DU	297
Vacant and Undeveloped Land	10.2 Acres	0	64.7 Acres	0	-54.5 Acres	0
Warehousing	76.3 ksf	383	103.2 ksf	517	-26.8 ksf	-134
Wholesale Trade	15.7 ksf	1,099	20.1 ksf	1,405	-4.4 ksf	-306
<b>TOTAL</b>		<b>371,564</b>	<b>0</b>	<b>316,877</b>	<b>0</b>	<b>54,687</b>

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 5-8, the Southeastern San Diego Lower-Density Alternative would generate 54,684 more daily trips when compared to the Existing Conditions, a 17.26% increase.

Table 5-9  
Land Use Comparison - Encanto Neighborhoods  
Lower-Density Alternative vs. Existing Conditions

Land Use	Lower-Density Alternative		Existing Conditions		Δ	Δ
	Amount	ADT	Amount	ADT	Amount	ADT
Alternative Correctional Facility	0	0	300 Cells	600	-300 Cells	-600
Arterial Commercial	826.1 ksf	33,045	236.5 ksf	9,459	589.6 ksf	23,586
Automobile Dealership	0.1 Acres	28	0.1 Acres	28	0.0 Acres	0
Automobile Repair Shop	8.8 ksf	177	8.8 ksf	177	0.0 ksf	0
Automobile Tire Store	0	0	0.0 ksf	0	0.0 ksf	0
Carwash (Self service)	0	0	4 stall	400	-4 stall	-400
Cemetery	40.5 Acres	202	44.7 Acres	224	-4.3 Acres	-22
Clinic (Medical Office)	27.6 ksf	1,382	0.0 ksf	0	27.6 ksf	1,382
Commercial Recreation	0	0	9.0 ksf	269	-9.0 ksf	-269
Communications and Utilities	37.3 Acres	0	40.4 Acres	0	-3.1 Acres	0
Community Shopping Center (100,000 SF or more)	291.3 ksf	20,389	81.0 ksf	5,673	210.2 ksf	14,716
Congregate Care Facility	0 Beds	0	18 Beds	54	-18 Beds	-54
Convenience Market Chain (Open Up to 16 Hours Per Day)	0	0	3.2 ksf	1,589	-3.2 ksf	-1,589
Day Care Center	70 child	350	145 child	725	-75 child	-375
Elementary School	4,377 Students	8,316	5,114 Students	9,716	-737 Students	-1,400
Fast Food (with or without Drive- through)	0 ksf	0	8.7 ksf	6,116	-8.7 ksf	-6,116
Fire/Police Station	14.5 ksf	435	14.5 ksf	435	0.0 ksf	0
Government Office (less or equal to 100,000 SF)	0	0	22.1 ksf	662	-22.1 ksf	-662
Government Office/Civic Center	0.0 ksf	0	18.5 ksf	556	-18.5 ksf	-556
Industrial Park	152.0 ksf	2,280	26.0 ksf	390	126.0 ksf	1,890
Junior High School or Middle School	1,547 Students	2,166	1,547 Students	2,166	0 Students	0
Library	27.6 ksf	1,378	27.6 ksf	1,378	0.0 ksf	0
Light Industry - General	345.0 ksf	5,175	418.8 ksf	6,282	-73.8 ksf	-1,107
MF Residential less or equal 20 DU/acre	1,026 DU	8,210	1,466 DU	11,728	-440 DU	-3,518
MF Residential over 20 DU/acre	11,179 DU	64,581	1,916 DU	11,496	9,264 DU	53,085
Mobile Home Park	250 DU	1,250	610 DU	3,050	-360 DU	-1,800

Table 5-9  
Land Use Comparison - Encanto Neighborhoods  
Lower-Density Alternative vs. Existing Conditions

Land Use	Lower-Density Alternative		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Neighborhood Shopping Center (30,000 SF or more)	70.7 ksf	8,479	62.0 ksf	7,436	8.7 ksf	1,043
Office (Low-Rise - 1 ksf to 5 ksf)	0	0	3.3 ksf	134	-3.3 ksf	-134
Office (Low-Rise - 10 ksf to 15 ksf)	0	0	11.1 ksf	312	-11.1 ksf	-312
Office (Low-Rise - 60 ksf to 65 ksf)	64.0 ksf	1,216	64.0 ksf	1,216	0.0 ksf	0
Office (Low-Rise - 65 ksf to 70 ksf)	71.0 ksf	1,348	71.8 ksf	1,364	-0.8 ksf	-16
Open Space Park or Preserve	207.1 Acres	1,035	201.3 Acres	1,006	5.9 Acres	29
Other Health Care	0	0	22.6 ksf	1,132	-22.6 ksf	-1,132
Other Recreation - High (Developed Park)	0	0	2.8 Acres	140	-2.8 Acres	-140
Other Retail Trade and Strip Commercial	11.4 ksf	455	12.6 ksf	502	-1.2 ksf	-47
Other School	14.5 ksf	261	24.3 ksf	437	-9.8 ksf	-176
Other Transportation	0	0	0.9 Acres	6	-0.9 Acres	-6
Park - Active	62.5 Acres	3,124	60.9 Acres	3,047	1.5 Acres	77
Parking Lot - Surface	0.3 Acres	0	6.6 Acres	0	-6.3 Acres	0
Public Storage	124.9 ksf	250	0.0 ksf	0	124.9 ksf	250
Public/Community Meeting Room Facility (Other Public Services)	21.4 ksf	643	37.8 ksf	1,135	-16.4 ksf	-492
Rail Station/Transit Center	2.8 Acres	833	5.3 Acres	1,596	-2.5 Acres	-763
Railroad Right of Way	20.4 Acres	0	20.4 Acres	0	0.0 Acres	0
Religious Facility (without day care)	288.6 ksf	1,441	307.6 ksf	1,537	-19.0 ksf	-96
Restaurant (High Turnover sit- down)	14.4 ksf	1,872	4.2 ksf	552	10.2 ksf	1,320
Senior High School	3,283 Students	5,909	3,283 Students	5,909	0 Students	0
Service Station	8 Station	1,080	8 Station	1,080	0 Station	0
Service Station (with food mart and automated carwash)	12 station	1,860	12 station	1,860	0 station	0
Service Station (with food mart)	26 station	3,900	26 station	3,900	0 station	0
Single Family Detached	7,998 DU	71,682	8,054 DU	72,486	-56 DU	-804
Single Family Multiple-Units	1,132 DU	10,188	1,174 DU	10,566	-42 DU	-378
Spaced Rural Residential	2 DU	24	2 DU	24	0 DU	0

Table 5-9  
Land Use Comparison - Encanto Neighborhoods  
Lower-Density Alternative vs. Existing Conditions

Land Use	Lower-Density Alternative		Existing Conditions		Δ Amount	Δ ADT
	Amount	ADT	Amount	ADT		
Supermarket (Stand-alone)	4.4 ksf	660	4.4 ksf	660	0.0 ksf	0
Vacant and Undeveloped Land	1.5 Acres	0	190.3 Acres	0	-188.8 Acres	0
Warehousing	0	0	1.7 ksf	8	-1.7 ksf	-8
<b>TOTAL</b>	-	265,624	-	191,218	-	74,406

Source: City of San Diego, Chen Ryan Associates; June 2015

Notes:  
ksf = Thousand Square Feet.  
DU = Dwelling Unit.

As shown in Table 5-9, the Encanto Neighborhoods Lower-Density Alternative would generate 74,406 more daily trips when compared to Existing Conditions, a 38.9% increase.

For comparison purposes, as well as to verify land use growth assumptions within the Southeastern San Diego and Encanto Neighborhoods communities, manual trip generation calculations by traffic analysis zone (TAZ) were conducted for both the Base Year land uses and the Lower-Density Alternative buildout land uses. The vehicular trip generation growth within the Southeastern San Diego and Encanto Neighborhoods communities are displayed in **Figure 5-4**. Additionally, a by TAZ comparison of the vehicular trip generation for Base Year vs. Lower-Density Alternative is provided in Appendix A.

As shown in Figure 5-4 and Appendix A, the majority of the TAZs within the Southeastern San Diego community are not anticipated to experience much (if any) growth in vehicular trip generation under buildout of the Lower-Density Alternative. The majority of growth within the community is anticipated to occur near the 25<sup>th</sup> and 32<sup>nd</sup> trolley stations within the proposed village district, as well as along the freeway corridors, particularly around the southwest quadrant of I-15 and SR-94 connector and the northwest quadrant of I-15 and I-5 connector. While, the majority of the TAZs within the Encanto Neighborhoods community are not anticipated to experience much (if any) growth in vehicular trip generation, especially along the northeastern and southeastern area of the community, under buildout of the Lower-Density Alternative. The majority of growth within the community is anticipated to occur near the 47<sup>th</sup> Street and Euclid Avenue trolley stations within the proposed village district, as well as along the freeway corridors, particularly around Imperial Avenue between I-805 and 61<sup>st</sup> Street, 47<sup>th</sup> Street between SR-94 and Imperial Avenue, Euclid Avenue between SR-94 and Imperial Avenue, and Logan Avenue between I-805 and Euclid Avenue.

# SOUTHEASTERN SAN DIEGO AND ENCANTO COMMUNITY PLAN UPDATES

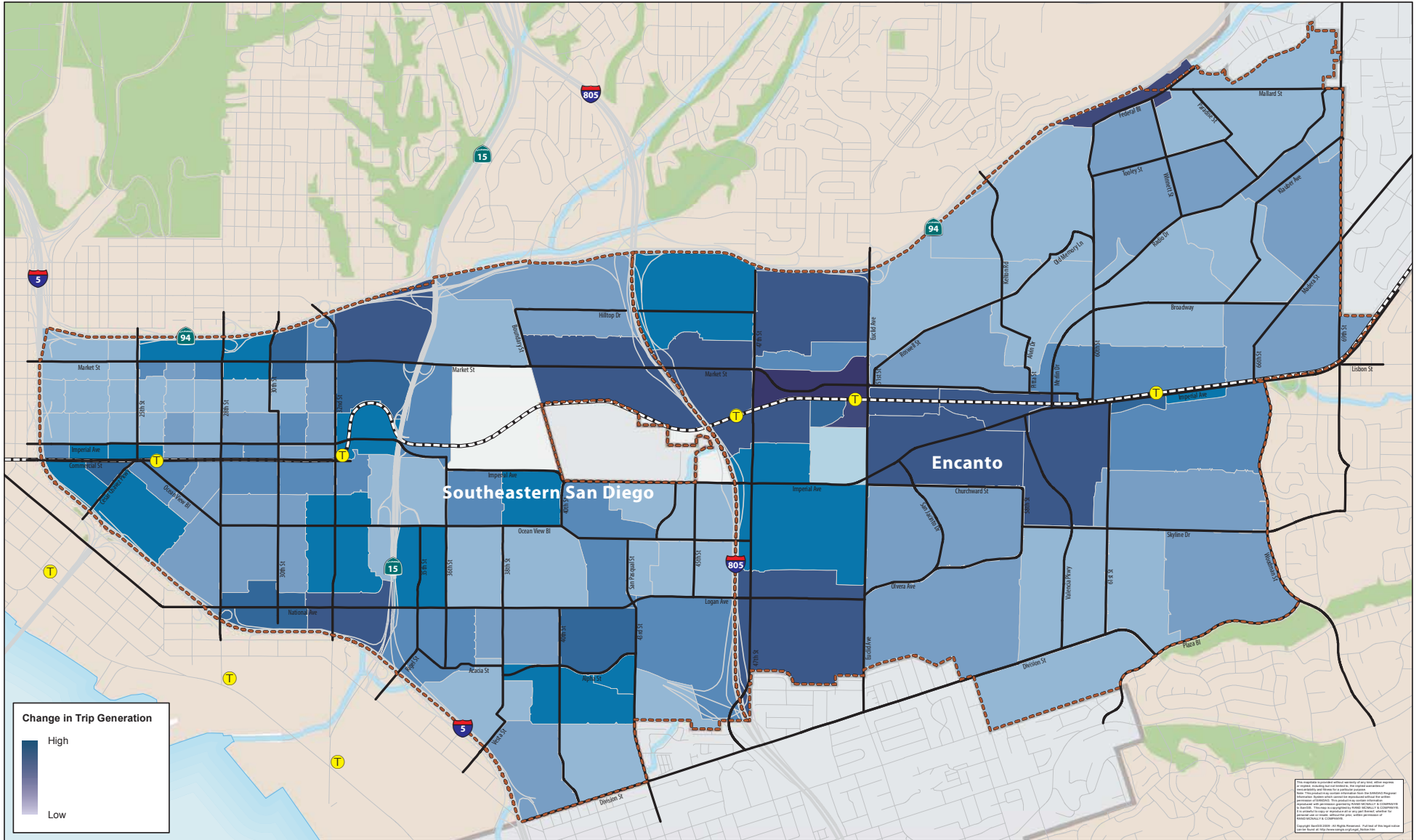


Figure 5-4: Trip Generation Growth by TAZ - Lower-Density versus Existing Conditions

## 6.0 Summary

This section provides a summary of the trip generation, vehicle miles traveled (VMT), roadway, intersection, and freeway operating conditions for the Adopted Community Plan, the Preferred Plan, the High Density Alternative, and the Lower-Density Alternative, as well as any impacts and mitigations associated with each scenario.

### 6.1 Summary of Trip Generation Analysis

The trip generation for the Adopted Community Plan, Preferred Plan, High Density, and Lower-Density Alternatives were compared to Existing Conditions to provide a relative comparison of how the traffic impacts of one alternative might compare to the others. **Table 6-1** displays the trip generation by scenario and their associated growth in vehicle trips when compared to Existing Conditions.

Table 6-1  
Trip Generation Comparison Summary

	Preferred Plan	Adopted Community Plan (No Project)	High Density Alternative	Lower-Density Alternative	Existing Conditions
<b>Southeastern San Diego</b>					
Trip Generation	375,546	368,143	378,463	371,564	316,877
Change in Trip Generation vs. Existing Conditions	58,669	51,266	61,586	54,687	-
Growth Rate	18.51%	16.18%	19.44%	17.26%	-
<b>Encanto Neighborhoods</b>					
Trip Generation	267,505	247,657	299,386	265,624	191,218
Change in Trip Generation vs. Existing Conditions	76,287	56,439	105,468	74,406	-
Growth Rate	39.90%	29.52%	55.15%	38.91%	-

Source: Chen Ryan Associates; June 2015

As shown in Table 6-1, the High Density Alternative exhibits the greatest growth rate (+61,586 ADT / +19.4% for Southeastern San Diego & +105,468 ADT / +55.1% for Encanto Neighborhoods), followed by the Preferred Plan (+58,669 ADT / +18.5% for Southeastern San Diego & +76,287 ADT / +39.9% for Encanto Neighborhoods), the Lower-Density Alternative (+54,687 ADT / +17.3% for Southeastern San Diego & +83,110 ADT / +38.9% for Encanto Neighborhoods) and the Adopted Community Plan (No Project) (+51,266 ADT / +16.2% for Southeastern San Diego & +56,439 ADT / +29.5%), when compared to Existing Conditions.

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## 6.2 Summary of VMT Analysis

**Table 6-2** provides a comparison of the total VMT for both the Southeastern San Diego and Encanto Neighborhoods communities under each analysis scenario. The Adopted Community Plan (No Project) and Lower-Density scenarios were not analyzed using this methodology. As shown, the High Density Alternative has slightly shorter trip lengths and daily VMT, for both Southeastern San Diego (Average Trip Length of 1.43 miles vs. 1.44 miles; VMT of 5.0 miles vs. 5.1 miles, respectively) and Encanto Neighborhoods (Average Trip Length of 1.89 miles vs. 1.96 miles; VMT of 3.6 miles vs. 3.8 miles, respectively) when compared to the Preferred Plan. The VMT by population in the Southeastern San Diego community under the High Density Alternative is 0.1 mile (-2.0%) less than the Preferred Plan, and the VMT by population in the Encanto Neighborhoods community under the High Density Alternative is 0.2 mile (-4.7%) less when compared to the Preferred Plan. The regional Average Trip Length and VMT under the High Density Alternative reduced slightly (Average Trip Length reduction of -0.01 mile or 0.0% and VMT reduction of -0.1 mile or -0.3%) when compared to the Preferred Plan, due to land use and population changes associated with the High Density Alternative.



**Table 6-2**  
**Summary of Vehicle Miles Traveled (VMT)**  
**Existing Condition vs. Preferred Plan vs. High Density Alternative**

Measure	Southeastern San Diego				Encanto Neighborhoods				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
<b>Preferred Plan</b>												
Total VMT (miles)	291,677	356,250	64,573	22.10%	206,790	293,099	86,309	41.70%	85,331,631	108,419,301	23,087,670	27.10%
Average Trip Length* (miles)	1.39	1.44	0.05	3.40%	2.01	1.96	-0.05	-2.30%	5.18	5.37	0.19	3.60%
Daily VMT by Population (miles)	5.1	5.1	0	0.00%	4.3	3.8	-0.5	-11.60%	27.3	26.9	-0.4	-1.50%
<b>High Density Alternative</b>												
Total VMT (miles)	291,677	362,950	71,273	24.40%	206,790	313,294	106,504	51.50%	85,331,631	108,496,206	23,164,575	27.10%
Average Trip Length* (miles)	1.39	1.43	0.04	3.10%	2.01	1.89	-0.12	-5.90%	5.18	5.37	0.18	3.60%
Daily VMT by Population (miles)	5.1	5.0	-0.1	-2.00%	4.3	3.6	-0.70	-16.30%	27.3	26.8	-0.5	-1.80%
Change in Average Trip Length (High Density – Preferred)	-	-0.01	-0.01	-0.30%	-	-0.07	-0.07	-3.60%	-	0.00	-0.01	0.00%
Change in VMT (High Density – Preferred)	-	-0.1	-0.1	-2.00%	-	-0.2	-0.2	-4.70%	-	-0.1	-0.1	-0.30%

Source: Chen Ryan Associates; June 2015

### 6.3 Summary of Roadway Segment Analysis

Table 6-3 displays the roadway segment level of service results within the project study area for Existing Conditions, Preferred Plan, and the High Density Alternative.

Table 6-3  
Summary of Roadway Segments Level of Service Results

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
1	Hilltop Drive	Boundary Street & I-805	B	C	D	Southeastern
2	Hilltop Drive	I-805 & 47th Street	C	C	D	Encanto
3	Market Street	17th Street & 19th Street	A	A	A	Southeastern
4	Market Street	19th Street & 25th Street	A	D	D	Southeastern
5	Market Street	25th Street & 28th Street	A	E	E	Southeastern
6	Market Street	28th Street & 32nd Street	B	F	F	Southeastern
7	Market Street	32nd Street & I-15 SB Ramps	B	C	C	Southeastern
8	Market Street	I-15 SB Ramps & I-15 NB Ramps	C	C	C	Southeastern
9	Market Street	I-15 NB Ramps & Boundary Street	C	D	D	Southeastern
10	Market Street	Boundary Street & I-805 SB Ramps	E	F	F	Southeastern
11	Market Street	I-805 SB Ramps & I-805 NB Ramps	B	F	F	Southeastern/Encanto
12	Market Street	I-805 NB Ramps & 47th Street	C	C	C	Encanto
13	Market Street	47th Street & Euclid Avenue	D	C	C	Encanto
14	Market Street/Akins Avenue	Euclid Avenue & 60th Street	F	F	F	Encanto
15	Imperial Avenue	17th Street & 19th Street	B	E	E	Southeastern
16	Imperial Avenue	19th Street & 25th Street	B	F	F	Southeastern
17	Imperial Avenue	25th Street & 28th Street	B	F	F	Southeastern
18	Imperial Avenue	28th Street & 30th Street	B	E	E	Southeastern
19	Imperial Avenue	30th Street & 32nd Street	A	D	D	Southeastern
20	Imperial Avenue	32nd Street & 36th Street	B	F	F	Southeastern
21	Imperial Avenue	36th Street & 40th Street	D	F	F	Southeastern
22	Imperial Avenue	40th Street & I-805 SB Ramps	A	C	C	Southeastern
23	Imperial Avenue	I-805 SB Ramps & I-805 NB Ramps	C	C	C	Southeastern/Encanto
24	Imperial Avenue	I-805 NB Ramps & 47th Street	D	D	E	Encanto
25	Imperial Avenue	47th Street & Euclid Avenue	D	D	E	Encanto
26	Imperial Avenue	Euclid Avenue & San Jacinto Drive	C	C	C	Encanto
27	Imperial Avenue	San Jacinto Drive & Valencia Parkway	F	F	F	Encanto

Table 6-3  
Summary of Roadway Segments Level of Service Results

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
28	Imperial Avenue	Valencia Parkway & Woodman Street	B	B	B	Encanto
29	Imperial Avenue	Woodman Street & 69th Street	B	C	C	Encanto
30	Imperial Avenue	69th Street & Viewcrest Drive	A	B	B	Encanto (Skyline/ Paradise Hills)
31	Commercial Street	17th Street & 19th Street	A	E	E	Downtown
32	Commercial Street	19th Street & 25th Street	A	C	D	Southeastern
33	Commercial Street	25th Street & 28th Street	A	B	C	Southeastern
34	Commercial Street	28th Street & 30th Street	A	B	C	Southeastern
35	Commercial Street	30th Street & 32nd Street	A	C	C	Southeastern
36	Ocean View Boulevard	25th Street & 28th Street	A	D	D	Southeastern
37	Ocean View Boulevard	28th Street & 30th Street	D	E	E	Southeastern
38	Ocean View Boulevard	30th Street & 32nd Street	C	C	D	Southeastern
39	Ocean View Boulevard	32nd Street & I-15 SB Ramps	E	F	F	Southeastern
40	Ocean View Boulevard	I-15 SB Ramps & I-15 NB Ramps	B	B	B	Southeastern
41	Ocean View Boulevard	I-15 NB Ramps & 36th Street	E	E	F	Southeastern
42	Ocean View Boulevard	36th Street & 40th Street	D	E	E	Southeastern
43	Ocean View Boulevard	40th Street & 47th Street	C	F	F	Southeastern
44	National Avenue	Commercial Street & Beardsley Street	A	D	D	Barrio Logan
45	National Avenue	Beardsley Street & SR-75 Off-Ramp	C	F	F	Barrio Logan
46	National Avenue	SR-75 Off-Ramp & 26th Street	A	B	B	Barrio Logan
47	National Avenue	26th Street & 27th Street/I-5 SB Off-Ramp	F	F	F	Barrio Logan
48	National Avenue	27th Street/I-5 SB Off-Ramp & 28th Street	C	F	F	Southeastern
49	National Avenue	28th Street & I-5 NB Ramps	F	F	F	Southeastern
50	National Avenue	I-5 NB Ramps & 32nd Street	D	F	F	Southeastern
51	National Avenue	32nd Street & 43rd Street	D	F	F	Southeastern
52	Logan Avenue	43rd Street & 45th Street	C	D	D	Southeastern
53	Logan Avenue	45th Street & 47th Street	C	E	E	Southeastern/Encanto
54	Logan Avenue	47th Street & Euclid Avenue	A	F	F	Encanto
55	Acacia Street	36th Street & 38th Street	A	C	B	Southeastern
56	Alpha Street	38th Street & 43rd Street	D	E	E	Southeastern
57	Division Street	Main Street & Osborn Street	F	F	F	Southeastern
58	Division Street	Osborn Street & Highland Avenue	D	D	D	Southeastern

**Table 6-3  
Summary of Roadway Segments Level of Service Results**

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
59	Division Street	Highland Avenue & Palm Avenue	B	B	C	National City
60	Division Street	Palm Avenue & Euclid Avenue	B	B	B	National City
61	Division Street	Euclid Avenue & Harbison Avenue	B	B	B	National City
62	Division Street	Harbison Avenue & 58th Street	F	E	E	Encanto
63	Division Street	58th Street & Valencia Parkway	D	E	E	Encanto
64	Division Street	Valencia Parkway & 61st Street	F	C	C	Encanto
65	Division Street	61st Street & Plaza Boulevard	B	C	C	Encanto
66	Cesar Chavez Parkway	Commercial Street & I-5 NB Ramps	D	F	F	Southeastern
67	Cesar Chavez Parkway	I-5 NB & SR-75 On-Ramp/Logan Avenue	B	C	C	Barrio Logan
68	25th Street	SR-94 WB Off-Ramp & SR-94 EB On-Ramp	D	F	F	Southeastern
69	25th Street	SR-94 EB On-Ramp & Market Street	D	F	F	Southeastern
70	25th Street	Market Street & Imperial Avenue	C	F	F	Southeastern
71	25th Street	Imperial Avenue & Commercial Street	B	D	D	Southeastern
72	28th Street	SR-94 WB Ramps & SR-94 EB Ramps	F	F	F	Southeastern
73	28th Street	SR-94 EB Ramps & Market Street	F	F	F	Southeastern
74	28th Street	Market Street & Imperial Avenue	E	F	F	Southeastern
75	28th Street	Imperial Avenue & Commercial Street	D	D	D	Southeastern
76	28th Street	Commercial Street & Ocean View Boulevard	C	E	E	Southeastern
77	28th Street	Ocean View Boulevard & National Avenue	F	F	F	Southeastern
78	28th Street	National Avenue & Boston Avenue	E	F	F	Barrio Logan
79	30th Street	E Street & Imperial Avenue	C	E	F	Southeastern
80	30th Street	Imperial Avenue & Commercial Street	B	C	D	Southeastern
81	30th Street	Commercial Street & National Avenue	C	C	D	Southeastern
82	Broadway/32nd Street	SR-94 WB & SR-94 EB On-Ramp / F Street	D	D	D	Southeastern
83	32nd Street	SR-94 EB On-Ramp/F Street & Market Street	D	F	F	Southeastern
84	32nd Street	Market Street & Imperial Avenue	D	F	F	Southeastern
85	32nd Street	Imperial Avenue & Commercial Street	B	D	D	Southeastern

Table 6-3  
Summary of Roadway Segments Level of Service Results

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
86	32nd Street	Commercial Street & Ocean View Boulevard	C	D	E	Southeastern
87	32nd Street	Ocean View Boulevard & National Avenue	C	E	E	Southeastern
88	32nd Street	National Avenue & Boston Avenue	D	F	F	Southeastern
89	35th Street/Rigel Street	Ocean View Boulevard & Main Street	E	F	F	Southeastern
90	36th Street	Imperial Avenue & Ocean View Boulevard	B	C	C	Southeastern
91	36th Street	Ocean View Boulevard & Acacia Street	B	C	C	Southeastern
92	38th Street	Ocean View Boulevard & Acacia Street	C	C	C	Southeastern
93	Vesta Street	Acacia Street & Main Street	C	D	D	Southeastern
94	40th Street	Imperial Avenue & Ocean View Boulevard	A	A	A	Southeastern
95	40th Street	National Avenue & Division Street	A	C	C	Southeastern
96	Boundary Street	Hilltop Drive & Market Street	A	B	B	Southeastern
97	San Pasqual Drive	Imperial Avenue & Ocean View Boulevard	B	C	D	Southeastern
98	San Pasqual Drive	Ocean View Boulevard & Logan Avenue	C	F	F	Southeastern
99	43rd Street	Logan Avenue & Newton Avenue	E	E	F	Southeastern
100	43rd Street	Newton Avenue & Beta Street	C	F	F	Southeastern
101	43rd Street	Beta Street & Delta Street	F	F	F	Southeastern
102	43rd Street/Highland Avenue	Delta Street & Division Street	D	E	F	Southeastern
103	Highland Avenue	Division Street & 4th Street	B	D	D	National City
104	45th Street	Imperial Avenue & Logan Avenue	A	B	A	Southeastern
105	Mallard Street	Federal Boulevard & 69th Street	E	F	F	Encanto
106	Federal Boulevard	60th Street & Mallard Street	C	C	C	Encanto
107	Federal Boulevard	Mallard Street & MacArthur Drive	C	D	D	Encanto
108	Tooley Street	60th Street & Paradise Street	A	A	A	Encanto
109	Roswell Street	51st Street & Old Memory Lane	A	B	C	Encanto
110	Old Memory Lane	Roswell Street & 60th Street	A	A	A	Encanto
111	Radio Drive	60th Street & Mallard Street	A	A	A	Encanto
112	Klauber Avenue	Broadway & 69th Street	A	A	A	Encanto
113	Broadway	60th Street & Madera Street	B	C	C	Encanto
114	Lisbon Street	Imperial Avenue & 71st Street	C	F	F	Encanto (Skyline/ Paradise Hills)

Table 6-3  
Summary of Roadway Segments Level of Service Results

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
115	Churchward Street/58th Street	Euclid Avenue & Skyline Drive	A	D	D	Encanto
116	Skyline Drive	58th Street & Valencia Parkway	B	C	C	Encanto
117	Skyline Drive	Valencia Parkway & 61st Street	D	F	F	Encanto
118	Skyline Drive	61st Street & Omeara Street	D	E	E	Encanto
119	Skyline Drive	Omeara Street & Woodman Street	D	D	D	Encanto
120	Skyline Drive	Woodman Street & 69th Street	B	D	D	Skyline/ Paradise Hills
121	Olvera Avenue/58th Street	Euclid Avenue & Skyline Drive	D	E	E	Encanto
122	Plaza Boulevard	Paradise Valley Road & Division Street	A	C	C	Encanto
123	Plaza Boulevard	Division Street & Woodman Street	B	E	E	Encanto
124	47th Street	SR-94 EB On-Ramp & Market Street	B	F	F	Encanto
125	47th Street	Market Street & Imperial Avenue	D	F	F	Encanto
126	47th Street	Imperial Avenue & Logan Avenue	B	F	F	Encanto
127	47th Street	Logan Avenue & I-805 NB Ramps	B	F	F	Encanto
128	47th Street	I-805 NB Ramps & I-805 SB Ramps	B	C	C	Encanto/ National City
129	47th Street/Palm Avenue	I-805 SB Ramps & Division Street	C	C	C	National City
130	Euclid Avenue	SR-94 WB Ramps & SR-94 EB Ramps	C	D	E	Encanto
131	Euclid Avenue	SR-94 EB Ramps & Market Street	E	D	E	Encanto
132	Euclid Avenue	Market Street & Imperial Avenue	D	C	D	Encanto
133	Euclid Avenue	Imperial Avenue & Logan Avenue	B	C	C	Encanto
134	Euclid Avenue	Logan Avenue & Division Street	A	C	C	Encanto/ National City
135	51st Street	Market Street & Roswell Street	A	A	A	Encanto
136	San Jacinto Drive	Imperial Avenue & Olvera Avenue	A	C	C	Encanto
137	Bayview Heights Way	SR-94 WB Ramps & SR-94 EB Ramps	F	F	F	Encanto
138	Kelton Road	SR-94 EB Ramps & Alvin Street	D	F	F	Encanto
139	Alvin Street	Kelton Road & Pitta Street	A	F	F	Encanto
140	Pitta Street	Alvin Street & Market Street	B	F	F	Encanto
141	Merlin Drive	Broadway & Imperial Avenue	C	C	C	Encanto
142	Valencia Parkway	Imperial Avenue & Skyline Drive	A	A	A	Encanto

Table 6-3  
Summary of Roadway Segments Level of Service Results

#	Roadway	Segment	Existing Conditions	Preferred Plan	High Density Alternative	Community
143	Valencia Parkway	Skyline Drive & Cervantes Avenue	A	B	B	Encanto
144	Valencia Parkway	Cervantes Avenue & Wesmead Street	A	B	B	Encanto
145	Valencia Parkway	Wesmead Street & Division Street	C	D	D	Encanto
146	60th Street	Federal Boulevard & Imperial Avenue	D	F	F	Encanto
147	61st Street	Imperial Avenue & Division Street	C	E	F	Encanto
148	Winnett Street	Federal Boulevard & Radio Drive	B	B	B	Encanto
149	Paradise Street	Mallard Street & Radio Drive	A	A	A	Encanto
150	Madera Street	Massachusetts Avenue & 69th Street	B	B	B	Lemon Grove
151	Madera Street/66th Street	69th Street & Akins Avenue	B	C	C	Encanto
152	Woodman Street	Imperial Avenue & Skyline Drive	E	F	F	Encanto
153	Woodman Street	Skyline Drive & Plaza Boulevard	A	A	A	Encanto
154	Woodman Street	Plaza Blvd & Paradise Valley Road	B	B	B	Encanto (Skyline/Paradise Hills)
155	69th Street	San Miguel Avenue & Mallard Street	D	D	D	Lemon Grove
156	69th Street	Mallard Street & Imperial Avenue	C	C	C	Encanto
157	69th Street	Imperial Avenue & Skyline Drive	B	C	C	Encanto (Skyline/Paradise Hills)

Source: Chen Ryan Associates; June 2015

Note:

Bold letter indicates unacceptable LOS E or F.

As shown above, a total of twenty-three (23) roadway segments currently operate at unacceptable LOS E or F under Existing Conditions, with eleven (11) roadway segments located within Southeastern San Diego, eight (8) roadway segments within Encanto Neighborhoods, two (2) segments within both Southeastern San Diego and Encanto Neighborhoods, and two (2) segments within the Southeastern San Diego sphere of influence (both in Barrio Logan). Whereas a total of sixty-eight roadway segments are projected to operate at LOS E or F under the Preferred Plan, with including thirty-nine (39) roadway segments located within Southeastern San Diego, twenty-two (22) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence. Lastly, seventy-three (73) roadway segments are projected to operate at LOS E or F under the High Density Alternative, with forty-one (41) roadway segments located within Southeastern San Diego, twenty-five (25) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence.



## 6.4 Summary of Intersection Analysis

Table 6-4 displays the intersection level of service results within the project study area for Existing Conditions and the Preferred Plan.

Table 6-4  
Summary of Intersection Peak Hour Level of Service Results

Intersection	Preferred Plan			Existing Conditions			Community
	Control	AM LOS	PM LOS	Control	AM LOS	PM LOS	
1. 17th Street/I-5 SB On-Ramp / J Street	Signal	B	A	Signal	A	A	Downtown
2. 17th Street/I-5 SB Off-Ramp / Imperial Avenue	Signal	B	B	Signal	B	B	Downtown
3. 19th Street / Market Street	Signal	A	C	Signal	A	B	Southeastern
4. 19th Street/I-5 NB Off-Ramp / J Street	AWSC	B	C	AWSC	A	B	Southeastern
5. 19th Street/I-5 NB On-Ramp / Imperial Avenue	Signal	B	B	Signal	B	B	Southeastern
6. 19th Street / Commercial Street	Signal	A	C	Signal	A	C	Southeastern
7. I-5 SB Off-Ramp/Beardsley Street / Logan Avenue	AWSC	C	E	AWSC	B	B	Barrio Logan
8. Cesar Chavez Parkway/SR-75 On-Ramp / Logan Avenue	Signal	C	D	Signal	C	C	Barrio Logan
9. Cesar Chavez Parkway / I-5 NB Ramps	Signal	C	C	Signal	C	B	Southeastern
10. I-5 SB On-Ramp / Logan Avenue	Signal	A	B	OWSC	A	E	Barrio Logan
11. SR-75 Off-Ramp / National Avenue	OWSC	B	B	OWSC	B	B	Barrio Logan
12. 25th Street / SR-94 WB Off-Ramp/F Street	Signal	B	A	AWSC	C	C	Golden Hill
13. 25th Street / SR-94 EB On-Ramp/G Street	Signal	A	B	AWSC	B	C	Southeastern
14. 25th Street / Market Street	Signal	D	D	Signal	C	C	Southeastern
15. 25th Street / Imperial Avenue	Signal	B	C	Signal	B	B	Southeastern
16. 25th Street/Cesar Chavez Parkway/Ocean View Boulevard / Commercial Street	Signal	C	C	Signal	C	C	Southeastern
17. 28th Street / SR-94 WB Ramps/Treat Street	Signal	B	C	TWSC	C	F	Golden Hill
18. 28th Street / SR-94 EB Ramps	Signal	C	C	OWSC	E	F	Southeastern
19. 28th Street / Imperial Avenue	Signal	B	B	Signal	B	B	Southeastern
20. 28th Street / Commercial Street	Signal	B	B	Signal	A	A	Southeastern

**Table 6-4  
Summary of Intersection Peak Hour Level of Service Results**

Intersection	Preferred Plan			Existing Conditions			Community
	Control	AM LOS	PM LOS	Control	AM LOS	PM LOS	
21. 28th Street / Ocean View Boulevard	Signal	C	C	Signal	B	B	Southeastern
22. 27th Street/I-5 SB Off-Ramp / National Avenue	OWSC	B	B	OWSC	B	C	Barrio Logan
23. 28th Street / National Avenue	Signal	E	D	Signal	C	B	Southeastern
24. I-5 NB Ramps / National Avenue	Signal	C	C	Signal	C	C	Southeastern
25. 28th Street/I-5 SB Off-Ramp / Boston Avenue	Signal	B	D	Signal	B	B	Barrio Logan
26. I-5 SB On-Ramp / Boston Avenue	Signal	C	C	OWSC	C	F	Barrio Logan
27. 30th Street / Imperial Avenue	Signal	B	B	Signal	B	A	Southeastern
28. 30th Street / Commercial Street	Signal	A	B	Signal	A	A	Southeastern
29. Broadway / SR-94 WB Ramps	Signal	B	B	OWSC	E	F	Golden Hill
30. Broadway/32nd Street / F Street	TWSC	C	D	TWSC	C	C	Southeastern
31. 32nd Street / Market Street	Signal	B	D	Signal	B	B	Southeastern
32. 32nd Street / Imperial Avenue	Signal	C	C	Signal	B	B	Southeastern
33. 32nd Street / Commercial Street	Signal	A	B	Signal	A	A	Southeastern
34. 32nd Street / Ocean View Boulevard	Signal	C	C	Signal	B	B	Southeastern
35. 32nd Street / National Boulevard	Signal	A	B	Signal	A	A	Southeastern
36. I-15 SB Ramps / Market Street	Signal	D	D	Signal	B	C	Southeastern
37. I-15 NB Ramps / Market Street	Signal	D	D	Signal	C	D	Southeastern
38. I-15 SB Ramps / Ocean View Boulevard	Signal	B	C	Signal	B	B	Southeastern
39. I-15 NB Ramps / Ocean View Boulevard	Signal	E	D	Signal	E	C	Southeastern
40. I-15 Ramps / Main Street	Signal	C	E	Signal	C	D	Barrio Logan
41. 36th Street / Imperial Avenue	Signal	B	B	Signal	B	B	Southeastern
42. 36th Street / Ocean View Boulevard	Signal	B	B	Signal	B	B	Southeastern
43. I-5 SB Off-Ramp/Yama Street / Main Street	Signal	C	F	Signal	C	D	Barrio Logan
44. Yama Street / I-5 SB On-Ramp	OWSC	A	A	OWSC	A	B	Barrio Logan
45. I-5 NB Ramps / Osborn Street	Signal	D	A	OWSC	F	F	Southeastern
46. Osborn Street / Division Street	Signal	D	C	AWSC	F	D	Southeastern/City of National City

**Table 6-4  
Summary of Intersection Peak Hour Level of Service Results**

Intersection	Preferred Plan			Existing Conditions			Community
	Control	AM LOS	PM LOS	Control	AM LOS	PM LOS	
47. Home Avenue / SR-94 WB On-Ramp / Ash Street/Federal Boulevard	Signal	C	D	Signal	C	C	Mid-City
48. Home Avenue/Federal Boulevard / SR-94 EB Off-Ramp/I-15 NB Off-Ramp	AWSC	B	D	AWSC	A	C	Southeastern
49. 40th Street / Imperial Avenue	Signal	D	E	Signal	B	C	Southeastern
50. 43rd Street / National Avenue	Signal	D	C	Signal	C	C	Southeastern
51. 43rd Street / I-805 Ramps	Signal	D	D	Signal	C	D	Southeastern
52. 43rd Street/Highland Avenue / Division Street	Signal	C	D	Signal	C	C	Southeastern
53. Market Street / I-805 SB Ramps	Signal	B	C	Signal	B	C	Southeastern
54. Market Street / I-805 NB Ramps	Signal	D	D	Signal	B	B	Encanto
55. Imperial Avenue / I-805 SB Ramps	Signal	C	C	Signal	C	C	Southeastern
56. Imperial Avenue / I-805 NB Ramps	Signal	C	C	Signal	B	B	Encanto
57. SR-94 WB On-Ramp / A Street	-			OWSC	B	B	
58. 47th Street / SR-94 EB On-Ramp	OWSC	A	A	OWSC	A	A	Encanto
59. 47th Street / Market Street	Signal	D	D	Signal	C	C	Encanto
60. 47th Street / Imperial Avenue	Signal	D	D	Signal	C	D	Encanto
61. 47th Street / Logan Avenue	Signal	C	D	Signal	C	C	Encanto
62. 47th Street / I-805 NB Ramps	Signal	C	B	Signal	B	A	Encanto
63. 47th Street / I-805 SB Ramps	Signal	B	E	Signal	B	C	Encanto
64. Palm Avenue / Division Street	Signal	D	D	Signal	C	C	City of National City
65. Euclid Avenue / SR-94 EB Ramps	Signal	B	B	OWSC	E	F	Encanto
66. Euclid Avenue / SR-94 WB Ramps	Signal	A	A	OWYC	F	F	Mid-City
67. Euclid Avenue / Market Street	Signal	C	D	Signal	C	C	Encanto
68. Euclid Avenue / Imperial Avenue	Signal	D	E	Signal	D	D	Encanto
69. Euclid Avenue / Olvera Avenue	Signal	E	E	Signal	D	D	Encanto
70. Euclid Avenue / Logan Avenue	Signal	B	C	Signal	B	C	Encanto
71. Euclid Avenue / Division Street	Signal	D	D	Signal	C	C	City of National City
72. Bayview Heights Way / SR-94 WB Ramps	Signal	C	D	AWSC	C	C	Mid-City

**Table 6-4  
Summary of Intersection Peak Hour Level of Service Results**

Intersection	Preferred Plan			Existing Conditions			Community
	Control	AM LOS	PM LOS	Control	AM LOS	PM LOS	
73. Kelton Road / SR-94 EB Ramps	Signal	B	D	AWSC	B	C	Encanto
74. 60th Street / SR-94 Ramps/Federal Boulevard	Signal	B	B	Signal	B	B	Encanto
75. Valencia Parkway / Imperial Avenue	Signal	D	D	Signal	C	C	Encanto
76. Valencia Parkway / Skyline Drive	Signal	D	C	Signal	C	C	Encanto
77. Division Street / Plaza Boulevard	Signal	B	B	AWSC	B	A	Encanto / Skyline
78. Woodman Street / Imperial Avenue	Signal	C	C	Signal	B	B	Encanto / Skyline
79. Woodman Street / Skyline Drive	Signal	E	D	Signal	D	C	Encanto / Skyline
80. Woodman Street / Plaza Boulevard	Signal	C	B	Signal	B	B	Encanto / Skyline
81. 69th Street / Imperial Avenue/Lisbon Street	Signal	C	C	Signal	D	D	Encanto / Skyline

Source: Chen Ryan Associates; June 2015

**Notes:**

Bold letter indicates unacceptable LOS E or F.

OWSC = One Way Stop Controlled

AWSC = All Way Stop Controlled

As shown, ten (10) study area intersections are currently operating at LOS E or F during the AM and/PM peak hour, including four (4) intersections located within Southeastern San Diego, two (2) within Encanto Neighborhoods, and four (4) within the sphere of influence area. In comparison, eleven (11) study area intersections are projected to operate at LOS E or F during the AM and/PM peak hour, including five (5) intersections located within Southeastern San Diego, three (3) within Encanto Neighborhoods, and three (3) within the sphere of influence area.

**6.5 Summary of Freeway/State Highway Segment Analysis**

**Table 6-5** displays the freeway level of service results within the project study area for Existing Conditions, Preferred Plan, and High Density Alternative.

**Table 6-5  
Summary of Freeway Segment Level of Service Results**

Freeway / State Highway	Segment	Direction	Existing Conditions	Preferred Plan	High Density Alternative
I-5	17th Street & SR-94	NB	C	D	D
		SB	E	F0	F0
	SR-94 & Imperial Avenue	NB	F0	F0	F0
		SB	D	E	E
	Imperial Avenue & SR-75	NB	D	E	E
		SB	C	D	D
	SR-75 & 28th Street	NB	D	E	E
		SB	C	D	D
	28th Street & I-15	NB	F0	F0	F0
		SB	D	E	E
I-15 & Main Street	NB	E	F0	F0	
	SB	E	F0	F0	
I-15	I-805 & SR-94	NB	C	C	C
			-	A	A
		SB	D	E	E
			-	A	A
	SR-94 & Market Street	NB	C	C	C
		SB	C	D	D
	Market Street & Ocean View Boulevard	NB	C	E	E
		SB	D	F0	F0
	Ocean View Boulevard & I-5	NB	A	C	C
		SB	A	B	B
I-5 & Norman Scott Road	NB	A	A	A	
	SB	A	A	A	
I-805	Home Avenue & SR-94	NB	F0	E	E
			-	D	E
		SB	F0	E	E
			-	D	D
	SR-94 & Market Street	NB	F0	E	E
			-	D	D
		SB	F0	E	E
			-	D	D
	Market Street & Imperial Avenue	NB	D	E	E
			-	E	E

**Table 6-5  
Summary of Freeway Segment Level of Service Results**

Freeway / State Highway	Segment	Direction	Existing Conditions	Preferred Plan	High Density Alternative	
I-805	Market Street & Imperial Avenue	SB	D	E	E	
			-	E	E	
	Imperial Avenue & 43rd Street	NB	D	E	E	
			-	D	E	
		SB	E	F0	F0	
			-	E	E	
	43rd Street & Plaza Boulevard	NB	C	D	D	
			-	C	C	
		SB	C	D	D	
			-	D	D	
	SR-94	17th Street & 25th Street	EB	D	E	E
				D	E	E
WB			-	A	A	
			-	A	A	
25th Street & 28th Street		EB	D	F0	F0	
			-	A	A	
		WB	C	E	E	
			-	A	A	
28th Street & 30th Street		EB	D	F0	F0	
			-	A	A	
		WB	D	F0	F0	
			-	A	A	
30th Street & I-15		EB	D	E	E	
			-	A	A	
		WB	D	E	E	
			-	A	A	
I-15 & Home Avenue		EB	D	D	D	
			-	A	A	
		WB	D	E	E	
			-	A	A	
Home Avenue & I-805		EB	C	D	D	
			-	A	A	
Home Avenue & I-805		WB	D	E	E	
			-	A	A	

**Table 6-5  
Summary of Freeway Segment Level of Service Results**

Freeway / State Highway	Segment	Direction	Existing Conditions	Preferred Plan	High Density Alternative
SR-94	I-805 & 47th Street	EB	D	F0	F0
		WB	E	F0	F0
	47th Street & Euclid Avenue	EB	D	E	E
			-	A	A
		WB	E	F0	F0
			-	A	A
	Euclid Avenue & Kelton Road	EB	D	F0	F0
			-	A	A
		WB	C	E	E
			-	A	A
	Kelton Road & Federal Boulevard	EB	D	F0	F0
			-	A	A
		WB	D	E	F0
			-	A	A
	Federal Boulevard & College Grove Way	EB	D	F0	F0
			-	A	A
		WB	D	E	E
			-	A	A
	College Grove Way & College Avenue	EB	D	F0	F0
			-	A	A
WB		D	F0	F0	
		-	A	A	

Source: Chen Ryan Associates; June 2015

Note:  
Bold letter indicates unacceptable LOS E or F.

As shown, there are currently nine (9) freeway segments within the project study area operating at LOS E or F. In comparison, twenty-four (24) freeway segments within the project study area are anticipated to operate at less than desirable LOS E or F) under both the Preferred Plan and the High Density Alternative.

## **6.6 Significant Impacts and Mitigation Measures**

This section provide a summary of the Southeastern San Diego and Encanto Neighborhoods CPU cumulative impacts to the roadway, intersections, and freeway network. These impacts are listed below:



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## **Roadway Segments**

### **Preferred Plan**

The Preferred Plan would have a cumulative impact on sixty-seven (67) study area roadway segments, including thirty-nine (39) roadway segments located within Southeastern San Diego, twenty-one (21) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence. They are as follow:

#### **Southeastern San Diego**

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street;
10. Market Street, between Boundary Street and I-805 SB Ramps;
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street;
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street;
21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps;
41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street;
42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street;
49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps;
50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street;
51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street;
57. Division Street, between Main Street and Osborn Street;
56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street;
66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps;
68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp;
69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue;
72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps;
73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street;
74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue;
76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard;
77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue;
79. 30<sup>th</sup> Street, between E Street and Imperial Avenue;
83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street;
84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue;

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87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue;
  88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue;
  89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street;
  99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue;
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street;
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street;
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street; and
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street.

#### Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street;
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway;
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway;
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street;
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street;
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street;
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive;
123. Plaza Boulevard, between Division Street and Woodman Street;
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue;
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue;
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps;
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps;
138. Kelton Road, between SR-94 EB Ramps and Alvin Street;
139. Alvin Street, between Kelton Road and Pitta Street;
140. Pitta Street, between Alvin Street and Market Street;
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue;
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street; and
152. Woodman Street, between Imperial Avenue and Skyline Drive.

#### Southeastern San Diego & Encanto Neighborhoods

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps;
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street; and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street.

#### Sphere of Influence

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp;
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street; and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue.

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## High Density Alternative

The High Density Alternative would have a cumulative impact on seventy-two (72) study area roadway segments, with forty-one (41) roadway segments located within Southeastern San Diego, twenty-four (24) roadway segments within Encanto Neighborhoods, three (3) segments within both Southeastern San Diego and Encanto Neighborhoods, and four (4) within the sphere of influence. They are as follow:

### Southeastern San Diego

5. Market Street, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
6. Market Street, between 28<sup>th</sup> Street and 32<sup>nd</sup> Street;
10. Market Street, between Boundary Street and I-805 SB Ramps;
15. Imperial Avenue, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
16. Imperial Avenue, between 19<sup>th</sup> Street and 25<sup>th</sup> Street;
17. Imperial Avenue, between 25<sup>th</sup> Street and 28<sup>th</sup> Street;
18. Imperial Avenue, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
20. Imperial Avenue, between 32<sup>nd</sup> Street & 36<sup>th</sup> Street;
21. Imperial Avenue, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
37. Ocean View Boulevard, between 28<sup>th</sup> Street and 30<sup>th</sup> Street;
39. Ocean View Boulevard, between 32<sup>nd</sup> Street and I-15 SB Ramps;
41. Ocean View Boulevard, between I-15 NB Ramps and 36<sup>th</sup> Street;
42. Ocean View Boulevard, between 36<sup>th</sup> Street and 40<sup>th</sup> Street;
48. National Avenue, between 27<sup>th</sup> Street and 28<sup>th</sup> Street;
49. National Avenue, between 28<sup>th</sup> Street and I-5 NB Ramps;
50. National Avenue, between I-5 NB Ramps and 32<sup>nd</sup> Street;
51. National Avenue, between 32<sup>nd</sup> Street and 43<sup>rd</sup> Street;
57. Division Street, between Main Street and Osborn Street;
56. Alpha Street, between 38<sup>th</sup> Street and 43<sup>rd</sup> Street;
66. Cesar Chavez Parkway, between Commercial Street and I-5 NB Ramps;
68. 25<sup>th</sup> Street, between SR-94 WB Off-Ramp and SR-94 EB On-Ramp;
69. 25<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
70. 25<sup>th</sup> Street, between Market Street and Imperial Avenue;
72. 28<sup>th</sup> Street, between SR-94 WB Ramps and SR-94 EB Ramps;
73. 28<sup>th</sup> Street, between SR-94 EB Ramps and Market Street;
74. 28<sup>th</sup> Street, between Market Street and Imperial Avenue;
76. 28<sup>th</sup> Street, between Commercial Street and Ocean View Boulevard;
77. 28<sup>th</sup> Street, between Ocean View Boulevard and National Avenue;
79. 30<sup>th</sup> Street, between E Street and Imperial Avenue;
83. 32<sup>nd</sup> Street, between SR-94 EB On-Ramp/F Street and Market Street;
84. 32<sup>nd</sup> Street, between Market Street and Imperial Avenue;
86. 32<sup>nd</sup> Street, between Commercial Street and Ocean View Boulevard;
87. 32<sup>nd</sup> Street, between Ocean View Boulevard and National Avenue;
88. 32<sup>nd</sup> Street, between National Avenue and Boston Avenue;
89. 35<sup>th</sup> / Rigel Street, between Ocean View Boulevard and Main Street;

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99. 43<sup>rd</sup> Street, between Logan Avenue and Newton Avenue;
  100. 43<sup>rd</sup> Street, between Newton Avenue and Beta Street;
  101. 43<sup>rd</sup> Street, between Beta Street and Delta Street;
  102. 43<sup>rd</sup> Street / Highland Avenue, between Delta Street and Division Street; and
  105. Mallard Street, between Federal Boulevard and 69<sup>th</sup> Street.

Encanto Neighborhoods

14. Market Street/Atkins Avenue, between Euclid Avenue and 60<sup>th</sup> Street;
24. Imperial Avenue, between I-805 NB Ramps and 47<sup>th</sup> Street;
25. Imperial Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
27. Imperial Avenue, between San Jacinto Drive and Valencia Parkway;
54. Logan Avenue, between 47<sup>th</sup> Street and Euclid Avenue;
63. Division Street, between 58<sup>th</sup> Street and Valencia Parkway;
114. Lisbon Street, between Imperial Avenue and 71<sup>st</sup> Street;
117. Skyline Drive, between Valencia Parkway and 61<sup>st</sup> Street;
118. Skyline Drive, between 61<sup>st</sup> Street and Omeara Street;
121. Olvera Avenue/58<sup>th</sup> Street, between Euclid Avenue and Skyline Drive;
123. Plaza Boulevard, between Division Street and Woodman Street;
124. 47<sup>th</sup> Street, between SR-94 EB On-Ramp and Market Street;
125. 47<sup>th</sup> Street, between Market Street and Imperial Avenue;
126. 47<sup>th</sup> Street, between Imperial Avenue and Logan Avenue;
127. 47<sup>th</sup> Street, between Logan Avenue and I-805 NB Ramps;
137. Bayview Heights Way, between SR-94 WB Ramps and SR-94 EB Ramps;
138. Kelton Road, between SR-94 EB Ramps and Alvin Street;
139. Alvin Street, between Kelton Road and Pitta Street;
140. Pitta Street, between Alvin Street and Market Street;
146. 60<sup>th</sup> Street, between Federal Boulevard and Imperial Avenue;
147. 61<sup>st</sup> Street, between Imperial Avenue and Division Street; and
152. Woodman Street, between Imperial Avenue and Skyline Drive.

Southeastern San Diego & Encanto Neighborhoods:

11. Market Street, between I-805 SB Ramps & I-805 NB Ramps;
43. Ocean View Boulevard, between 40<sup>th</sup> Street and 47<sup>th</sup> Street; and
53. Logan Avenue, 45<sup>th</sup> Street and 47<sup>th</sup> Street.

Sphere of Influence:

31. Commercial Street, between 17<sup>th</sup> Street and 19<sup>th</sup> Street;
45. National Avenue, between Beardsley Street and SR-75 Off-Ramp;
47. National Avenue, between 26<sup>th</sup> Street and 27<sup>th</sup> Street; and
78. 28<sup>th</sup> Street, between National Avenue and Boston Avenue.

As shown, the High Density Alternative would have a cumulative impact to seventy-two (72) roadway segment in compare to the Preferred Plan which would have a cumulative impact on sixty-seven (67) roadway segments.

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## **Intersections**

The Preferred Plan would have a cumulative impact on ten (10) study area intersections, including four (4) intersections located within Southeastern San Diego, three (3) within Encanto Neighborhoods, and three (3) within the sphere of influence area. They are as follows:

### **Southeastern San Diego**

23. 28th Street / National Avenue;
38. I-15 NB Ramps / Ocean View Boulevard;
49. 40th Street / Imperial Avenue; and
63. 47th Street / I-805 SB Ramps.

### **Encanto Neighborhoods**

68. Euclid Avenue / Imperial Avenue;
69. Euclid Avenue / Olvera Avenue; and
79. Woodman Street / Skyline Drive.

### **Sphere of Influence**

7. I-5 SB Off-Ramp / Beardsley Street / Logan Avenue;
40. I-15 Ramps / Main Street; and
43. I-5 SB Off-Ramp/Yama Street/Main Street.

## **Freeway Segments**

The Preferred Plan would have a cumulative impact on twenty-two (22) freeway segments within the project study area, they are as follow:

- I-5, between 17th Street and SR-94;
- I-5, between SR-94 and Imperial Avenue;
- I-5, between Imperial Avenue and SR-75;
- I-5, between SR-75 and 28th Street;
- I-5, between 28th Street and I-15;
- I-5, between I-15 and Main Street;
- I-15, between I-805 and SR-94;
- I-15, between Market Street and Ocean View Boulevard;
- I-805, between Market Street and Imperial Avenue;
- I-805, between Imperial Avenue and 43rd Street;
- SR-94, between 17th Street and 25th Street;
- SR-94, between 25th Street and 28th Street;
- SR-94, between 28th Street and 30th Street;
- SR-94, between 30th Street and I-15;
- SR-94, between I-15 and Home Avenue;
- SR-94, between Home Avenue and I-805;
- SR-94, between I-805 and 47th Street;
- SR-94, between 47th Street and Euclid Avenue;

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- SR-94, between Euclid Avenue and Kelton Road;
  - SR-94, between Kelton Road and Federal Boulevard;
  - SR-94, between Federal Boulevard and College Grove Way; and
  - SR-94, between College Grove Way and College Avenue.

In conclusion, the High Density Alternative would have a cumulative impact on twenty-two (22) freeway segments within the project study area, they are as follow:

- I-5, between 17th Street and SR-94;
- I-5, between SR-94 and Imperial Avenue;
- I-5, between Imperial Avenue and SR-75;
- I-5, between SR-75 and 28th Street;
- I-5, between 28th Street and I-15;
- I-5, between I-15 and Main Street;
- I-15, between I-805 and SR-94;
- I-15, between Market Street and Ocean View Boulevard;
- I-805, between Market Street and Imperial Avenue;
- I-805, between Imperial Avenue and 43rd Street;
- SR-94, between 17th Street and 25th Street;
- SR-94, between 25th Street and 28th Street;
- SR-94, between 28th Street and 30th Street;
- SR-94, between 30th Street and I-15;
- SR-94, between I-15 and Home Avenue;
- SR-94, between Home Avenue and I-805;
- SR-94, between I-805 and 47th Street;
- SR-94, between 47th Street and Euclid Avenue;
- SR-94, between Euclid Avenue and Kelton Road;
- SR-94, between Kelton Road and Federal Boulevard;
- SR-94, between Federal Boulevard and College Grove Way; and
- SR-94, between College Grove Way and College Avenue.

As shown above, both the Preferred Plan and the High Density Alternative would have the same number of cumulative impact to freeway segments within the project study area.