

TRAFFIC OPERATIONS ANALYSIS

2015 TRAFFIC UPDATE

CLINTON KEITH ROAD EXTENSION PROJECT

COUNTY OF RIVERSIDE, CALIFORNIA

May 21, 2015

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COUNTY OF RIVERSIDE, CALIFORNIA

Prepared for:

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LSA Project No. COR1401

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INTRODUCTION

The Riverside County Transportation Department (RCTD), in cooperation with the City of Murrieta, proposes to construct a six-lane urban arterial in the City of Murrieta and an unincorporated area of Riverside County that would extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79). A Supplemental Environmental Impact Report (SEIR) for the Clinton Keith Road Extension Project (project) was certified in January 2006 (CH2M Hill 2006). The SEIR analyzed changes associated with the design of the project that had occurred since the original EIR was approved in 2000. Figure 1 illustrates the regional location of the proposed project.

The overall project includes four segments as follows:

- Segment 1 between Antelope Road and Whitewood Road (already constructed);
- Segment 2 between Whitewood Road and Trois Valley Street (not yet constructed);
- Segment 3 between Trois Valley Street and Leon Road (already constructed); and
- Segment 4 between Leon Road and SR 79 (not yet constructed).

Since the approval of the SEIR, Segments 1 (the City of Murrieta's local road improvement project) and 3 (by development in the unincorporated area of Riverside County) have been constructed.

This SEIR Addendum is being prepared because construction of Segments 2 and 4 are now being phased due to financial constraints. At this time, funding for construction of Segment 2 is available. Construction would consist of either a 2-lane interim or a 4-lane interim facility.

The purpose of this analysis is to determine the impacts to the surrounding roadway network due to construction phasing. Construction of Clinton Keith Road from Whitewood Road to Trois Valley Street will require the interim routing to and from SR 79 via Leon Road and Max Gillis Boulevard. Leon Road and Max Gillis Boulevard are both fully built to the ultimate cross-section.

Two design options for Segment 2 are proposed:

- A 2-lane roadway consisting of building the south half of the ultimate 6-lane cross-section and striping it for one travel lane in each direction, a six-foot wide painted median, and full grading for the remaining half width.
- A 4-lane roadway consisting of constructing the two outside lanes in each direction and full grading for the two remaining inside lanes and median area.

Timing for construction of the remaining full width of Segment 2 and construction of Segment 4 will be dependent on additional funds becoming available and/or development constructing their frontage improvements.

This analysis examines traffic volumes and levels of service within the study area for the two interim design options and the eventual build out of the Clinton Keith Road Extension Project. Figure 2 illustrates the proposed alignment and traffic pattern for opening year (2018) conditions. The eventual build-out is anticipated to be completed by 2035 or earlier and includes Clinton Keith Road extending

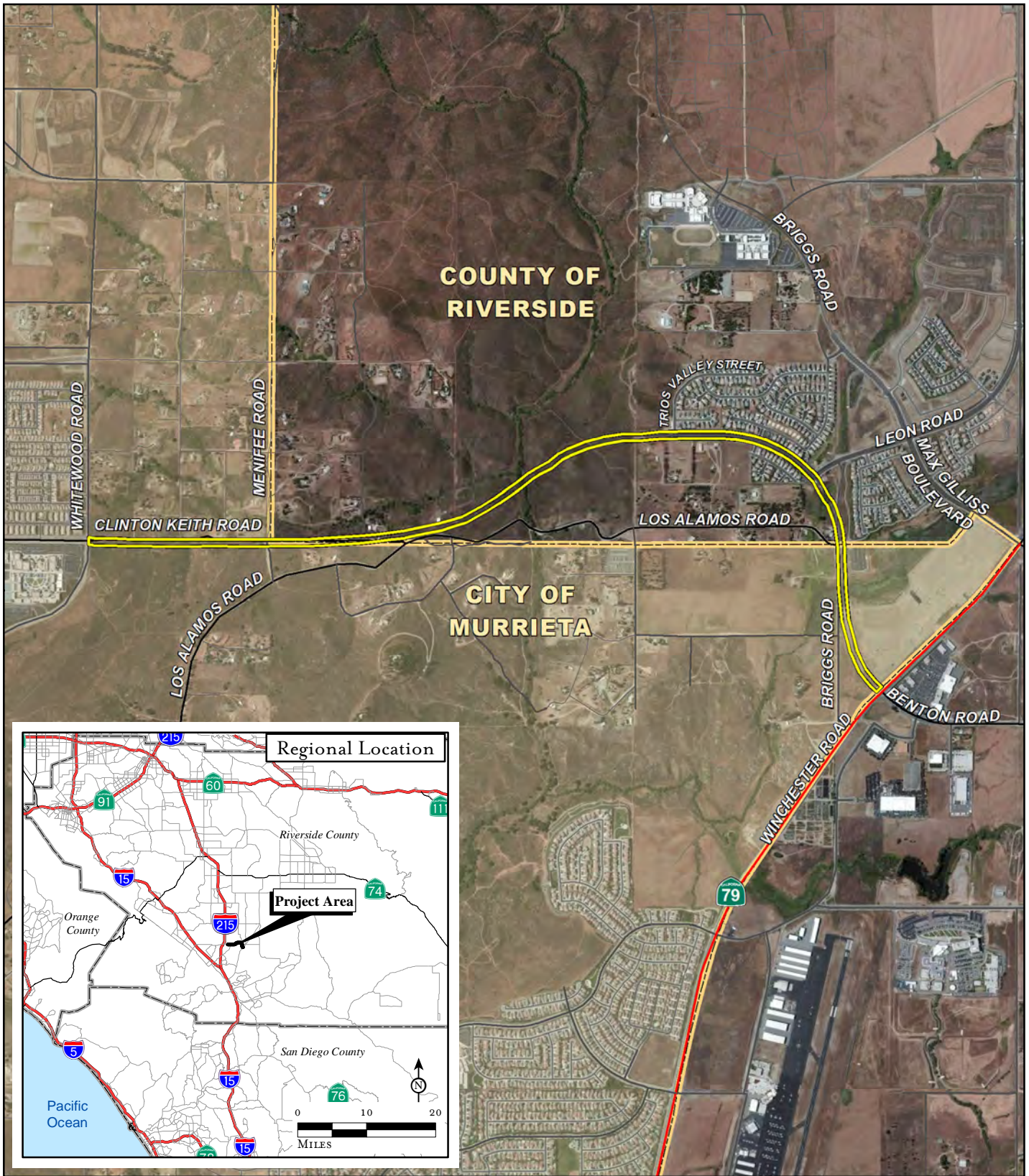
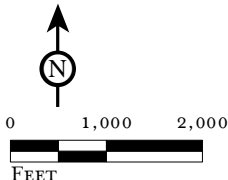


FIGURE 1

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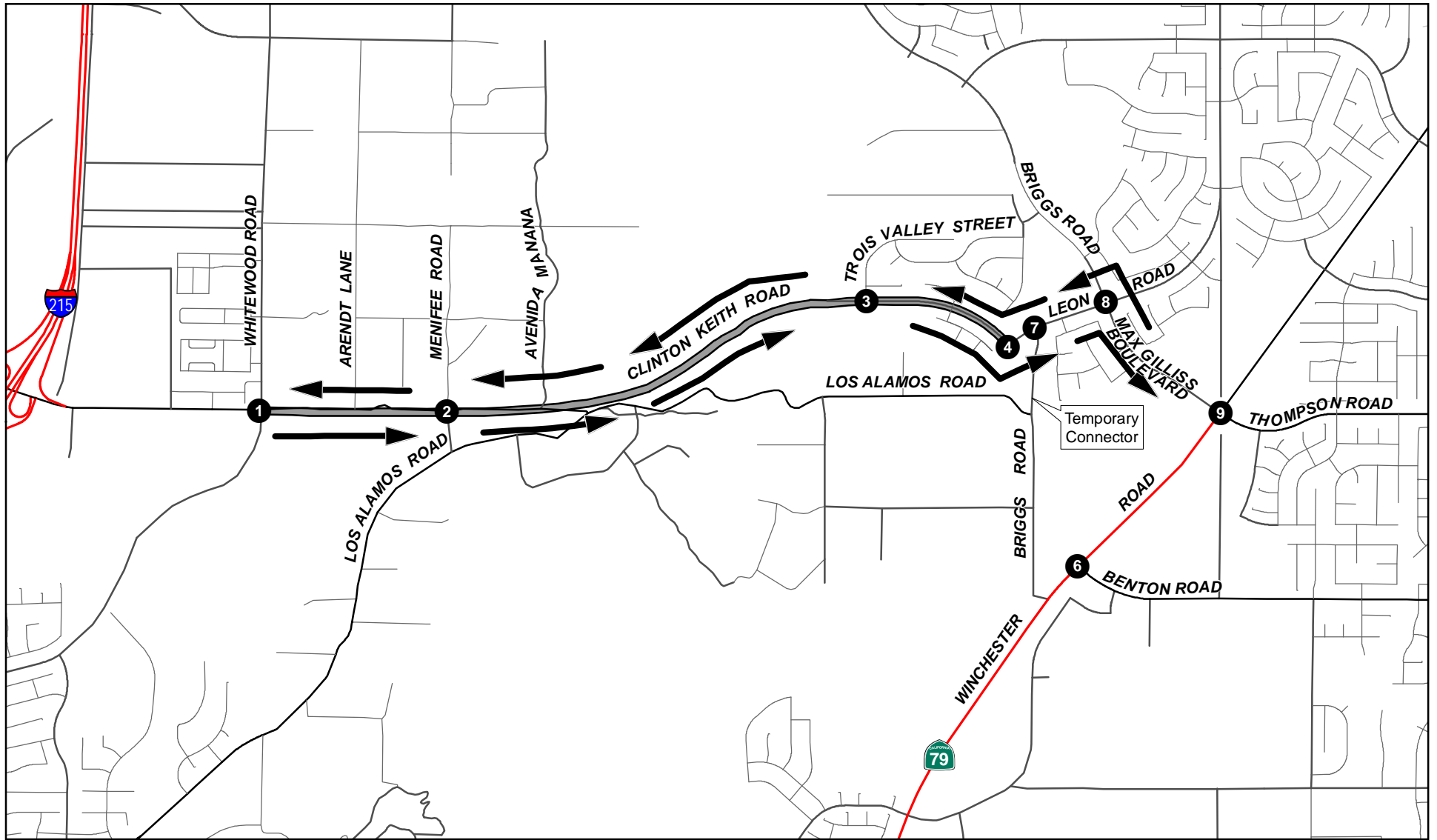


- Legend**
- Project Area
 - City Boundary

*2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis*

Regional and Project Location

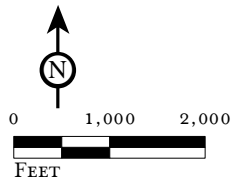
SOURCE: Bing Aerial, 2010; Riverside County, 2014.
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LSA

Legend

- Project Area
- Study Intersections
- Travel Direction



SOURCE: Riverside County, 2014

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FIGURE 2

2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis

Opening Year (2018) with 2/4 Lanes
Proposed Alignment and Traffic Pattern

from Leon Road to SR 79 (Segment 4), consistent with the SEIR. Figure 3 illustrates the proposed alignment and traffic pattern for 2035 conditions.

The following five scenarios are included in the analysis:

- Existing (2014) conditions;
- Opening Year (2018) Without Project Conditions (no improvements to Clinton Keith Road);
- Opening Year (2018) With 2-Lane Design Option (Clinton Keith Road widened to two lanes and extended from Whitewood Road to Trois Valley Street);
- Opening Year (2018) With 4-Lane Design Option (Clinton Keith Road widened to four lanes and extended from Whitewood Road to Trois Valley Street); and
- Year 2035 conditions (Clinton Keith Road widened to six lanes from Whitewood Road to SR 79).

This report analyzes the weekday a.m. and p.m. peak hours for study area intersections and daily traffic conditions for roadway segments.

STUDY AREA

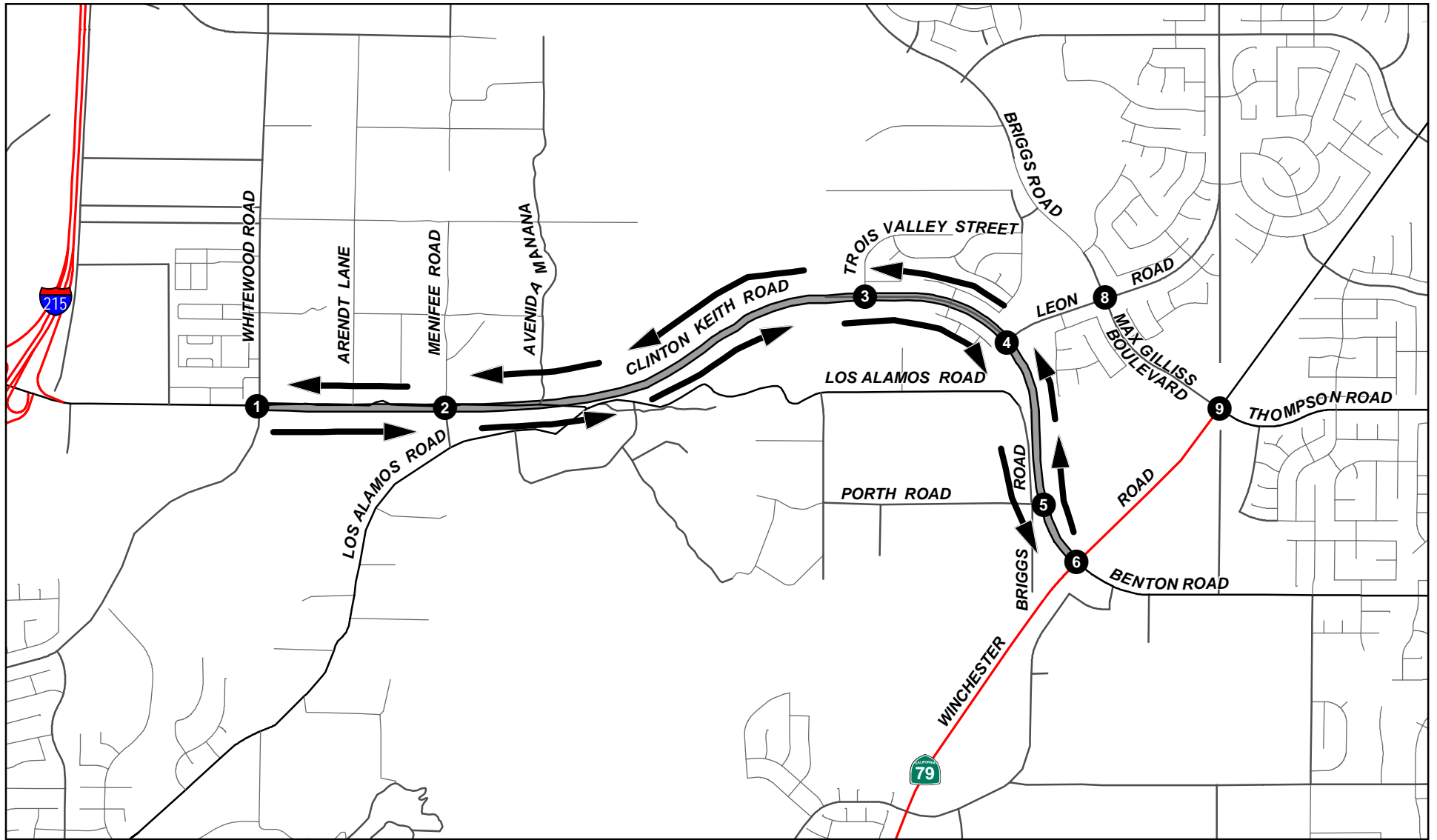
With the phasing of the Clinton Keith Road improvements, potential impacts to surrounding roadways have been analyzed in addition to analyzing the interim Clinton Keith Road as a 2-lane or 4-lane road. Traffic traveling on the newly constructed interim section will utilize Leon Road and Max Gillis Boulevard at the project's east end. Max Gillis Boulevard and Leon Road are both designated as 4-lane Major roadways in the County's General Plan.

In addition, the interim connection of Briggs Road at Leon Road will be converted to a right-in/right-out only movement until Clinton Keith Road is connected directly to SR 79 via Segment 4 of the project. The temporary connection will be removed and access to and from the Los Alamos area will be provided from Briggs Road to Clinton Keith Road via Porth Road. The Porth Road connection is part of the overall approved Clinton Keith Road Project.

This analysis also includes an assessment of traffic conditions on Los Alamos Road with and without the project. Traffic from recent development in the area currently utilizes Los Alamos Road as an alternate east-west connector. The recent increase in volume along this 2-lane, narrow roadway is not desirable. Los Alamos Road is not a General Plan Road and is not designed to carry a significant volume of traffic. The construction of Clinton Keith Road is anticipated to reduce traffic in the rural residential area and provide a higher level, more direct route between Interstate 215 (I-215) and SR 79. For analysis purposes, a functional classification of Collector has been used to calculate level of service for Los Alamos Road.

The study area includes the following intersections:

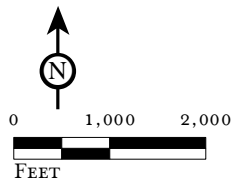
1. Whitewood Road/Clinton Keith Road;
2. Menifee Road/Clinton Keith Road;
3. Trois Valley Street/Clinton Keith Road;



LSA

Legend

- Project Area
- Study Intersections
- Travel Direction



SOURCE: Riverside County, 2014

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FIGURE 3

*2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis*

**Year 2035 with 6 Lanes
Proposed Alignment and Traffic Pattern**

4. Clinton Keith Road/Leon Road;
5. Porth Road/Clinton Keith Road;
6. SR 79/Clinton Keith Road-Benton Road;
7. Briggs Road/Leon Road;
8. Max Gillis Boulevard/Leon Road; and
9. SR 79/Max Gillis Boulevard.

The analysis also includes the following roadway segments:

- Clinton Keith Road:
 - Between Whitewood Road and Menifee Road;
 - Between Menifee Road and Trois Valley Street;
 - Between Trois Valley Street and Leon Road;
 - Between Leon Road and Porth Road; and
 - Between Porth Road and SR 79.
- Leon Road:
 - Between Clinton Keith Road and Briggs Road; and
 - Between Briggs Road and Max Gillis Boulevard.
- Max Gillis Boulevard:
 - Between Leon Road and SR 79.
- Los Alamos Road:
 - West of Menifee Road;
 - Between Menifee Road and Liberty Lane; and
 - Between Liberty Lane and Briggs Road.

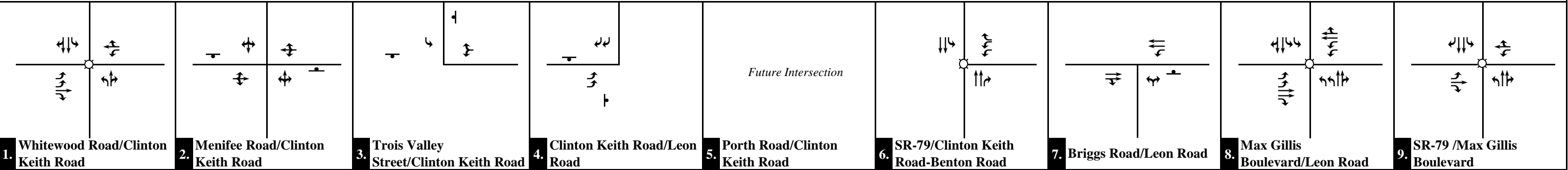
Previously referenced Figures 2 and 3 illustrate the study area intersections and roadway segments.

Under existing and opening year without project conditions, Clinton Keith Road east of Whitewood Road is a 2-lane dirt road that extends to Los Alamos Road. Leon Road is a 4-lane Major from Clinton Keith Road to Max Gillis Boulevard. Max Gillis Boulevard is a 4-lane Major from Leon Road to SR 79. Los Alamos Road is a 2-lane Collector. Figure 4 illustrates the intersection lane geometrics and stop control at each study intersection under existing and opening year (2018) without project conditions.

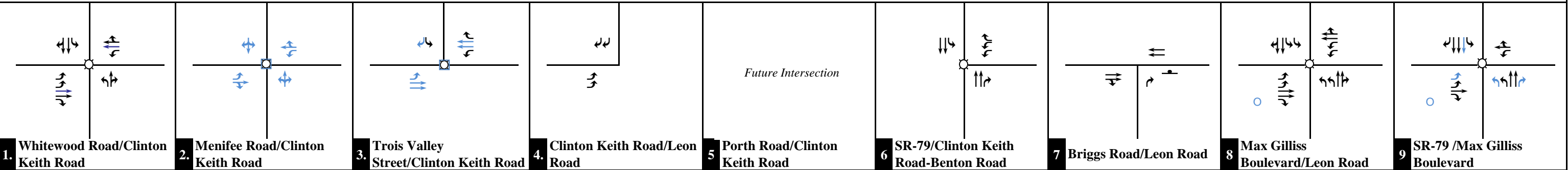
PROJECT DESCRIPTION

As stated previously, there are two design options of the Clinton Keith Road Extension under opening year (2018) conditions and the project build-out analyzed under year 2035 conditions.

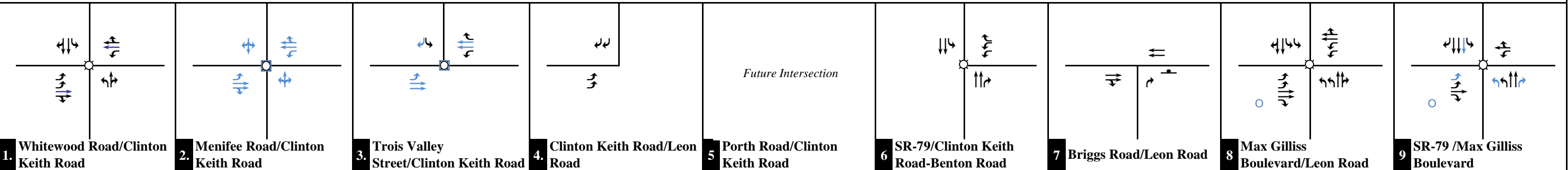
Existing and Opening Year (2018) Without Project Geometrics



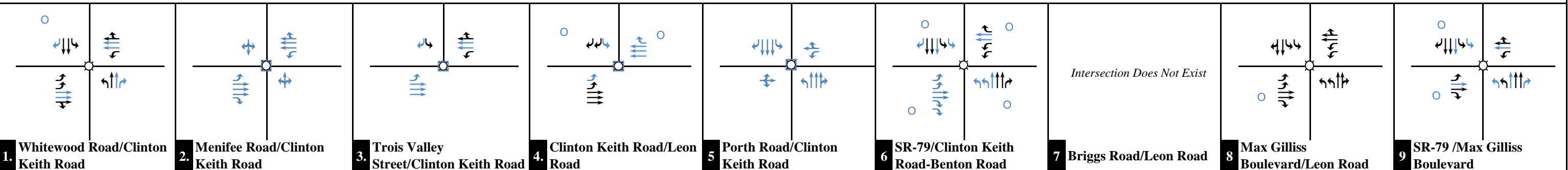
Opening Year (2018) With Clinton Keith Road Extension (2-Lanes)



Opening Year (2018) With Clinton Keith Road Extension (4-Lanes)



Year 2035 With Clinton Keith Road Extension (6-Lanes)



- Legend
- ⊠ Signal
 - ↔ Improvements
 - ⊠ Stop Sign
 - Overlap Phasing

FIGURE 4

2015 Update
Clinton Keith Road Extension Traffic Operations Analysis

Intersection Geometrics and Stop Control

It is the desire of the local agencies to build as much of the ultimate improvements as possible within the current budget. For this reason, both a lower-cost 2-lane design option and a higher-cost 4-lane design option are being considered and analyzed for the interim 2018 Project Opening. The 2035 scenario considers the full build 6-lane facility consistent with the approved SEIR.

Opening Year (2018) Conditions

Under opening year (2018) with two lanes conditions, Clinton Keith Road will be widened to two lanes and extend from the east leg of Whitewood Road/Clinton Keith Road and align with the west leg at Trois Valley Street/Clinton Keith Road. Under opening year (2018) with four lanes conditions, Clinton Keith Road will be widened to four lanes and extend from the east leg of Whitewood Road/Clinton Keith Road and align with the west leg at Trois Valley Street/Clinton Keith Road.

The intersection of Trois Valley Street/Clinton Keith Road will be signalized as part of the opening year with project (2018) conditions. The intersection of Menifee Road/Clinton Keith Road will be converted to a two-way stop control intersection under opening year (2018) conditions for the 2-lane design option.

Under opening year (2018) 4-lane design option, it has been assumed that a signal will be constructed at the Clinton Keith Road/Menifee Road intersection for safety purposes since Clinton Keith will be much wider than with the 2-lane alternative

Additionally, the temporary intersection of Briggs Road/Leon Road will be restricted to right-in/right-out access under opening year (2018) with the two lane and four lane design options. All other roadways and intersections are assumed unchanged in 2018.

Previously referenced Figure 4 illustrates the intersection lane geometrics and stop control at each study intersection under opening year (2018) with two lanes and four lanes conditions. Figure 4 illustrates all improvements that will be constructed along Clinton Keith Road as part of the proposed project. For the intersection of Max Gillis Boulevard and Leon Road, the analysis includes planned signal phasing changes to be implemented by the County of Riverside prior to 2018. Additionally, the intersection of SR 79/Max Gillis Boulevard is anticipated to be improved by development prior to opening year (2018) conditions.

Year 2035 Conditions

Under year 2035, Clinton Keith Road will be widened to six lanes and extend from the east leg of Whitewood Road/Clinton Keith Road and align with the existing intersection of Benton Road at SR 79. The temporary connection of Briggs Road to Leon Road will be eliminated prior to or with the completion of Clinton Keith Road.

Additionally, Briggs Road will terminate north of SR 79. Previously referenced Figure 3 shows the alignment and the new intersections on Clinton Keith Road under the project build-out conditions.

In addition to the intersections being signalized under opening year (2018) conditions, the intersection of Clinton Keith Road/Leon Road and Clinton Keith Road/Porth Road will also be signalized under

year 2035 conditions. These improvements will be constructed by the County, City of Murrieta, development, or a combination thereof.

Previously referenced Figure 4 illustrates the intersection lane geometrics and stop control at each study intersection under year 2035 conditions.

TRAFFIC VOLUME DEVELOPMENT

Existing Traffic Volumes

Existing traffic volumes at the intersections of SR 79/Clinton Keith Road and Briggs Road/Leon Road are based on peak hour intersection turn movement counts collected by Counts Unlimited in October 2014. Existing traffic volumes at the remaining intersections are based on traffic count data provided by the County of Riverside. These data reflected traffic volumes under year 2013 conditions. LSA applied an annual growth rate to reflect existing (2014) volumes for these study intersections. The annual growth rate has been calculated from the Riverside County Traffic Analysis Model (RivTAM) and has been described in the opening year (2018) without project conditions section. Existing traffic data are contained in Appendix A.

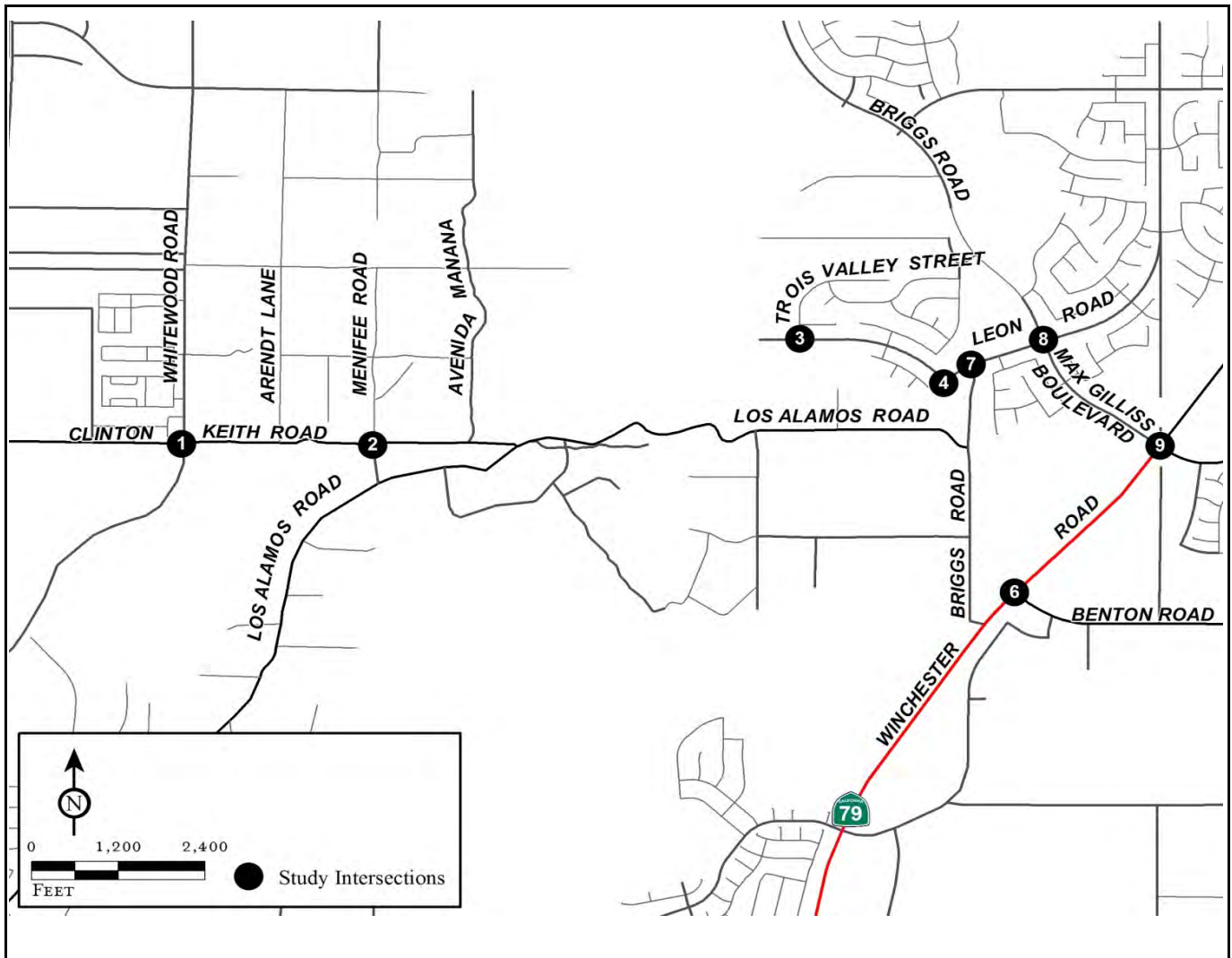
Previously referenced Figure 4 illustrates the existing intersection geometrics of the study intersections. Figure 5 illustrates the existing a.m. and p.m. peak hour traffic volumes at the study intersections. Figure 6 illustrates the existing daily traffic volumes at the study roadway segments. Detailed volume development worksheets are included in Appendix B.

Opening Year (2018) Traffic Volumes Without Project

Opening Year (2018) without project peak hour intersection and roadway segment volumes were developed by applying an annual growth rate to existing (2014) traffic volumes. The annual growth rate has been derived from RivTAM by calculating the per year growth between the base year (2007) without project model run and the future year (2060) without project model run. Opening year (2018) without project a.m. and p.m. peak hour traffic volumes at the study intersections are illustrated in Figure 7. Figure 8 illustrates the opening year (2018) without project roadway segment volumes. Detailed volume development worksheets are contained in Appendix B.

Opening Year (2018) Traffic Volumes With 2-Lane Design Option

RivTAM base year and future year model networks were modified to reflect the proposed roadway network under opening year (2018) with 2-lane design option. Raw traffic model data from RivTAM base and future year model runs were post-processed using National Cooperative Highway Research Program (NCHRP) 255 methodologies to develop peak-hour turning movement volumes at each study area intersection and roadway segments. The volume development methodology is described in Appendix C. Opening year (2018) with two lanes a.m. and p.m. peak hour traffic volumes at the study intersections are illustrated in Figure 9. Figure 10 illustrates the opening year (2018) with two lanes roadway segment volumes. Detailed volume development worksheets are contained in Appendix B.



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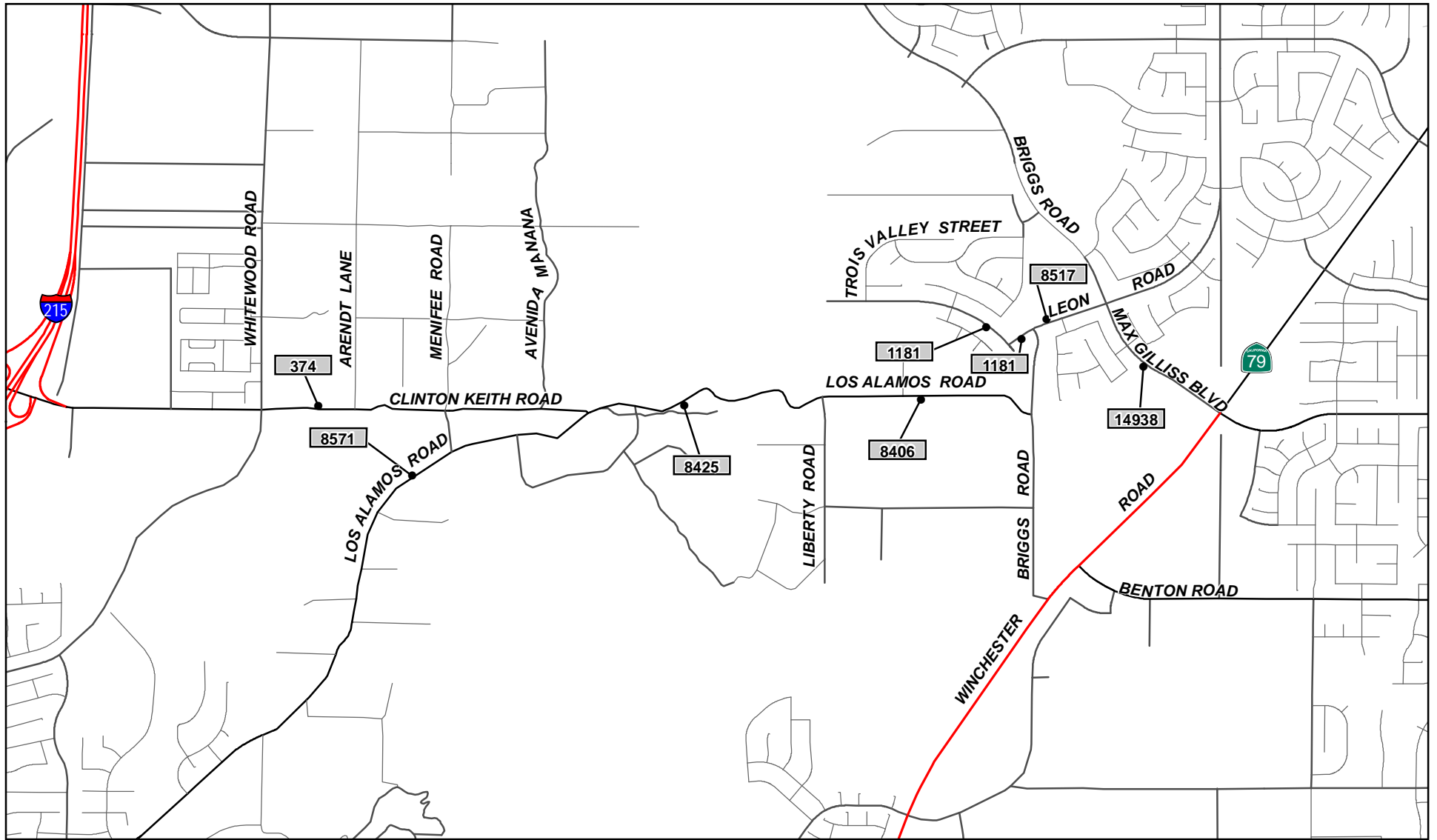
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FIGURE 5

Legend

XXXX / XXXX AM / PM Peak Hour Volumes

2015 Update
Clinton Keith Road Extension Traffic Operations Analysis
Existing Peak Hour Traffic Volumes

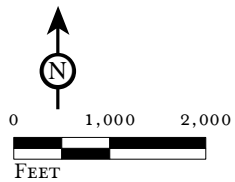


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FIGURE 6

Legend

432 Average Daily Traffic Volumes

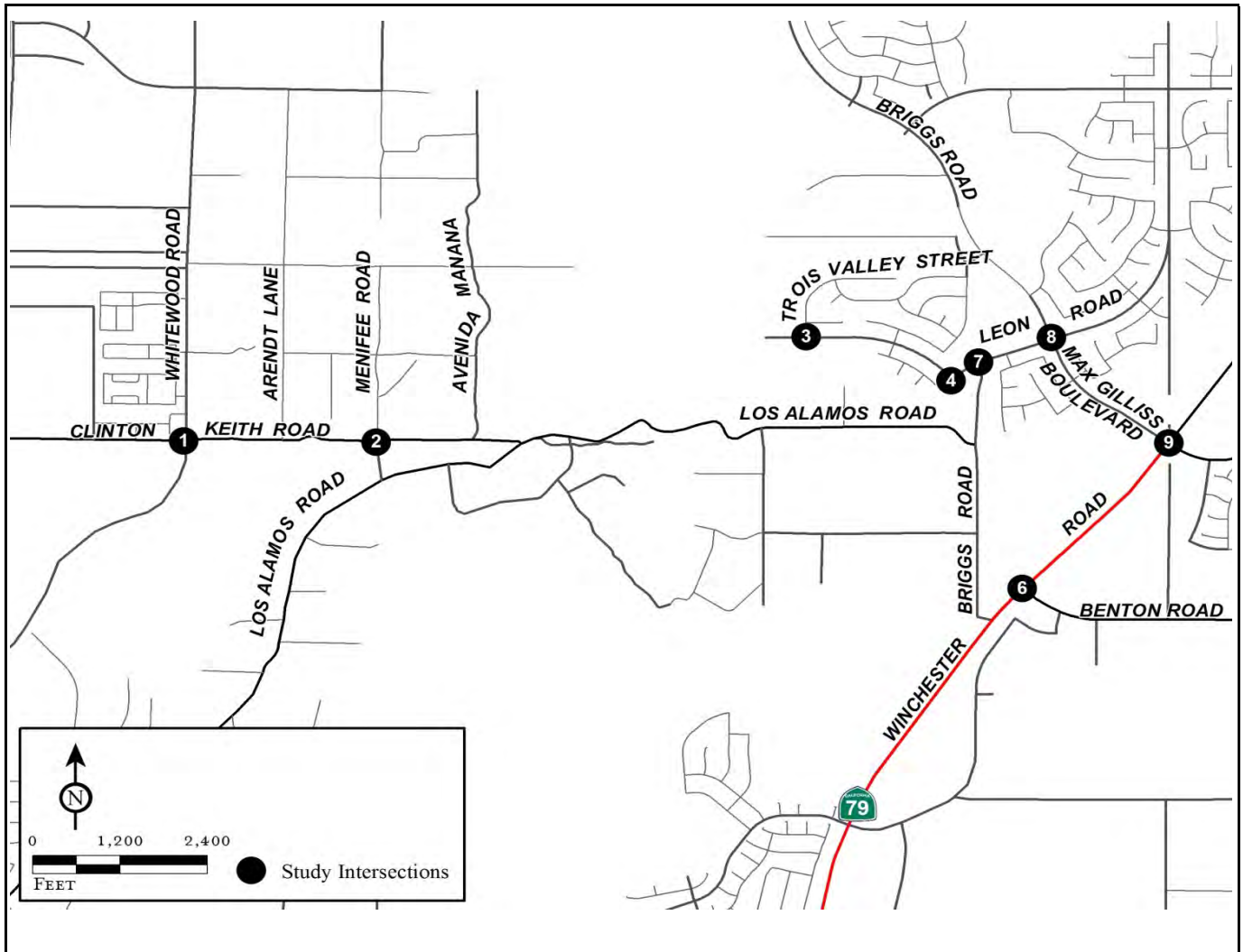


SOURCE: Riverside County, 2014.

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2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis

Existing Roadway Segment Daily Traffic Volumes



<table border="1"> <tr><td>128 / 71</td><td>←</td><td>144 / 115</td><td>↑</td><td>0 / 2</td></tr> <tr><td>←</td><td>1 / 5</td><td>↑</td><td>11 / 1</td><td></td></tr> <tr><td>127 / 150</td><td>↓</td><td>39 / 8</td><td></td><td></td></tr> <tr><td>6 / 4</td><td>→</td><td></td><td></td><td></td></tr> <tr><td>352 / 445</td><td>↘</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>168 / 267</td><td>↗</td><td></td></tr> <tr><td></td><td></td><td>74 / 110</td><td>→</td><td></td></tr> <tr><td></td><td></td><td>14 / 12</td><td>↘</td><td></td></tr> </table>	128 / 71	←	144 / 115	↑	0 / 2	←	1 / 5	↑	11 / 1		127 / 150	↓	39 / 8			6 / 4	→				352 / 445	↘						168 / 267	↗				74 / 110	→				14 / 12	↘		<table border="1"> <tr><td>12 / 3</td><td>←</td><td>5 / 5</td><td>↑</td><td>5 / 5</td></tr> <tr><td>←</td><td>5 / 5</td><td>↑</td><td>12 / 3</td><td></td></tr> <tr><td>5 / 5</td><td>↓</td><td>5 / 5</td><td></td><td></td></tr> <tr><td>2 / 2</td><td>→</td><td></td><td></td><td></td></tr> <tr><td>5 / 5</td><td>↘</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>12 / 3</td><td>↗</td><td></td></tr> <tr><td></td><td></td><td>5 / 5</td><td>→</td><td></td></tr> <tr><td></td><td></td><td>5 / 5</td><td>↘</td><td></td></tr> </table>	12 / 3	←	5 / 5	↑	5 / 5	←	5 / 5	↑	12 / 3		5 / 5	↓	5 / 5			2 / 2	→				5 / 5	↘						12 / 3	↗				5 / 5	→				5 / 5	↘		<table border="1"> <tr><td>36 / 24</td><td>↘</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>12 / 41</td><td>↗</td><td></td></tr> </table>	36 / 24	↘						12 / 41	↗		<table border="1"> <tr><td>38 / 58</td><td>↘</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>31 / 75</td><td>↗</td><td></td></tr> </table>	38 / 58	↘						31 / 75	↗		<p style="text-align: center;"><i>Future Intersection</i></p>																									
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FIGURE 7

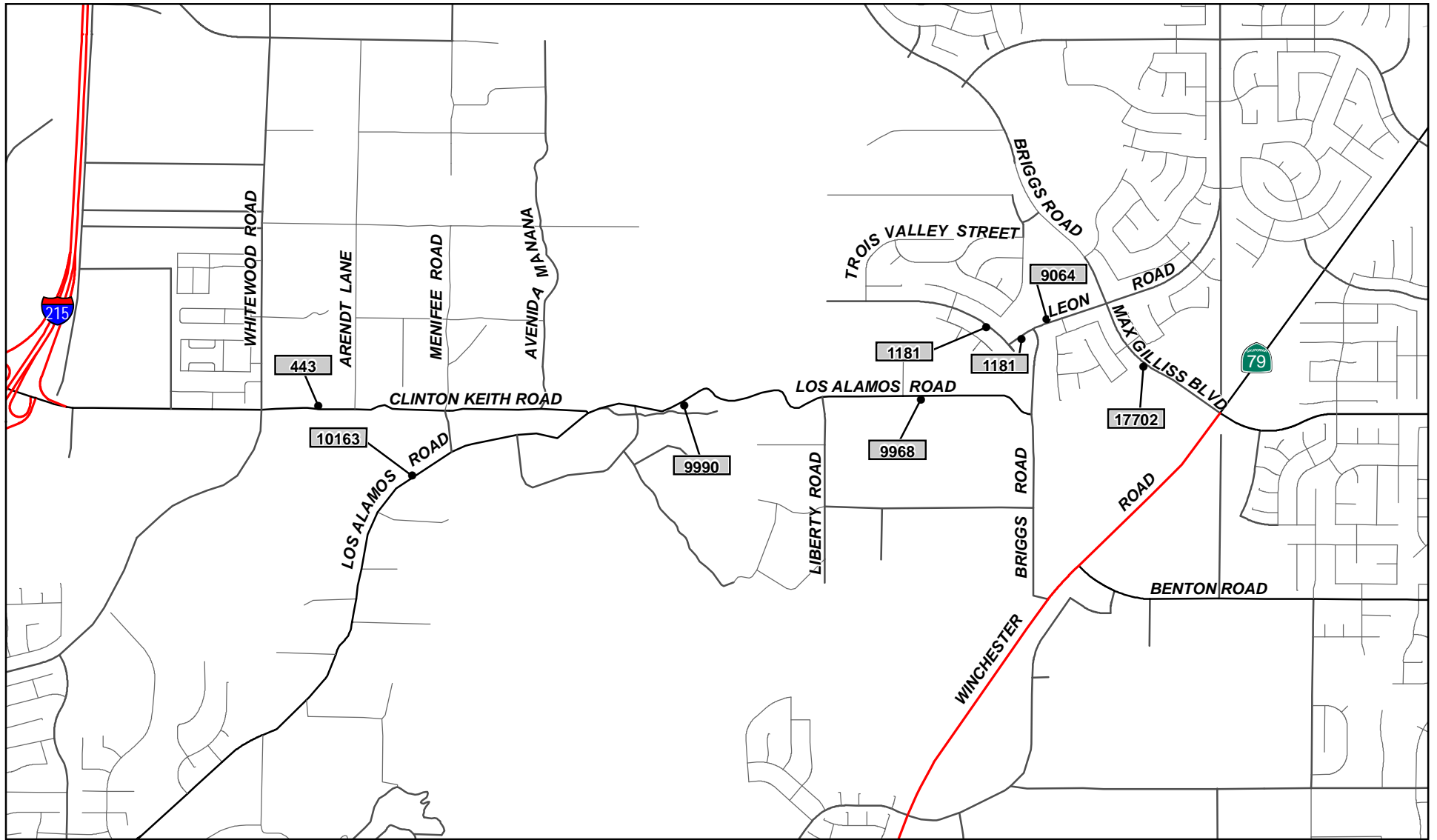
Legend

XXXX / XXXX AM / PM Peak Hour Volumes

2015 Update

Clinton Keith Road Extension Traffic Operations Analysis

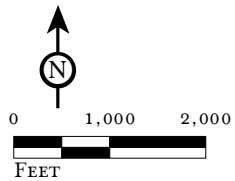
Opening Year Without Project Peak Hour Traffic Volumes



LSA

Legend

432 Average Daily Traffic

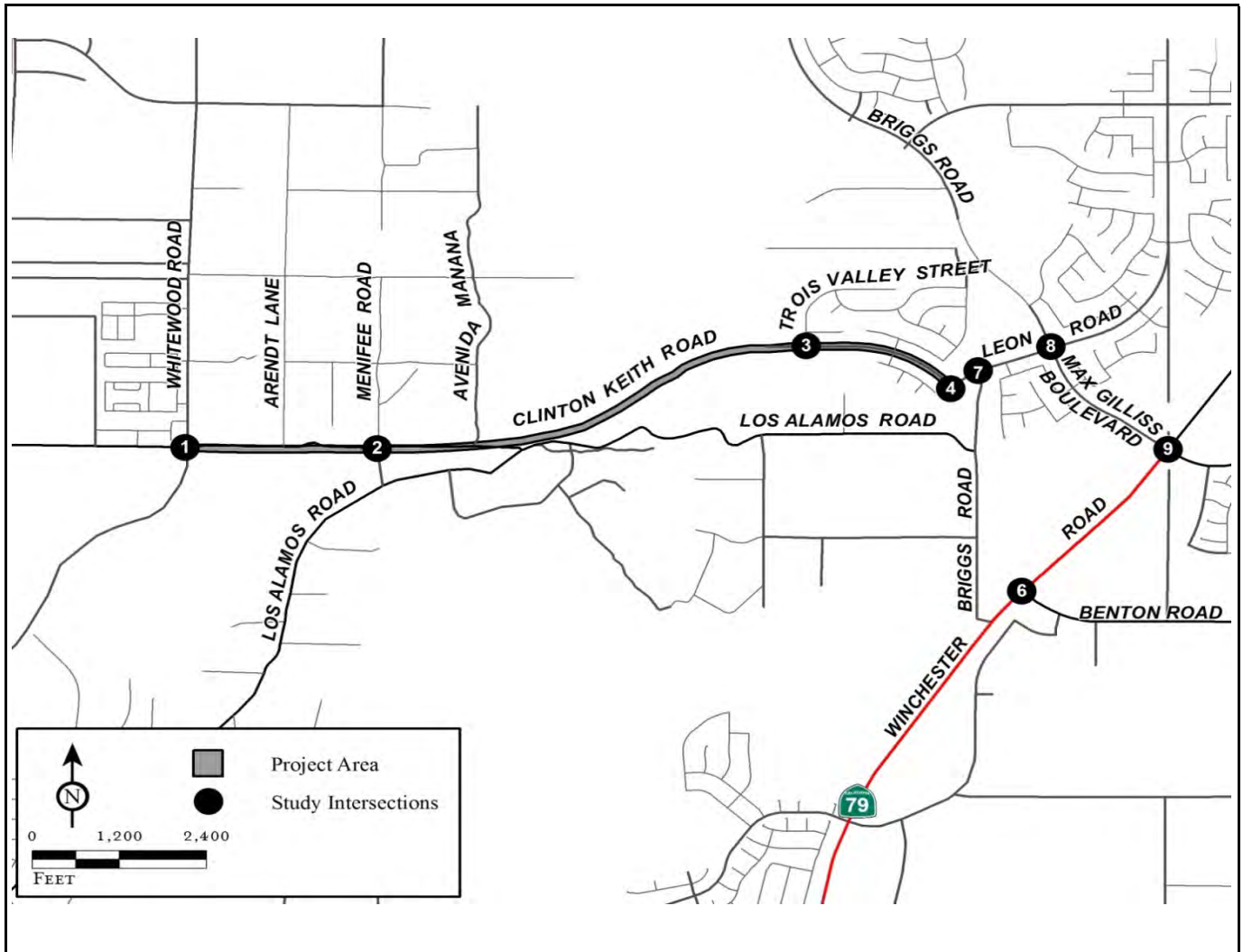


SOURCE: Riverside County, 2014.

FIGURE 8

*2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis*

Opening Year (2018) Without Project
Roadway Segment Daily Traffic Volumes



<table border="1"> <tr> <td>68 / 134</td> <td>115 / 136</td> <td>48 / 67</td> </tr> <tr> <td>100 / 67</td> <td>401 / 499</td> <td></td> </tr> <tr> <td>85 / 94</td> <td>34 / 90</td> <td></td> </tr> <tr> <td>596 / 444</td> <td>165 / 197</td> <td>60 / 76</td> </tr> <tr> <td>177 / 175</td> <td>68 / 86</td> <td>68 / 86</td> </tr> </table>	68 / 134	115 / 136	48 / 67	100 / 67	401 / 499		85 / 94	34 / 90		596 / 444	165 / 197	60 / 76	177 / 175	68 / 86	68 / 86	<table border="1"> <tr> <td>16 / 20</td> <td>37 / 32</td> <td>16 / 22</td> </tr> <tr> <td>115 / 87</td> <td>9 / 18</td> <td>343 / 423</td> </tr> <tr> <td>24 / 25</td> <td></td> <td></td> </tr> <tr> <td>500 / 411</td> <td>189 / 190</td> <td>27 / 28</td> </tr> <tr> <td>174 / 184</td> <td>90 / 112</td> <td></td> </tr> </table>	16 / 20	37 / 32	16 / 22	115 / 87	9 / 18	343 / 423	24 / 25			500 / 411	189 / 190	27 / 28	174 / 184	90 / 112		<table border="1"> <tr> <td>18 / 12</td> <td>7 / 10</td> </tr> <tr> <td>456 / 520</td> <td></td> </tr> <tr> <td>5 / 30</td> <td></td> </tr> <tr> <td>594 / 511</td> <td></td> </tr> </table>	18 / 12	7 / 10	456 / 520		5 / 30		594 / 511		<table border="1"> <tr> <td>474 / 533</td> </tr> <tr> <td>722 / 698</td> </tr> </table>	474 / 533	722 / 698	<i>Future Intersection</i>							
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LSA

FIGURE 9

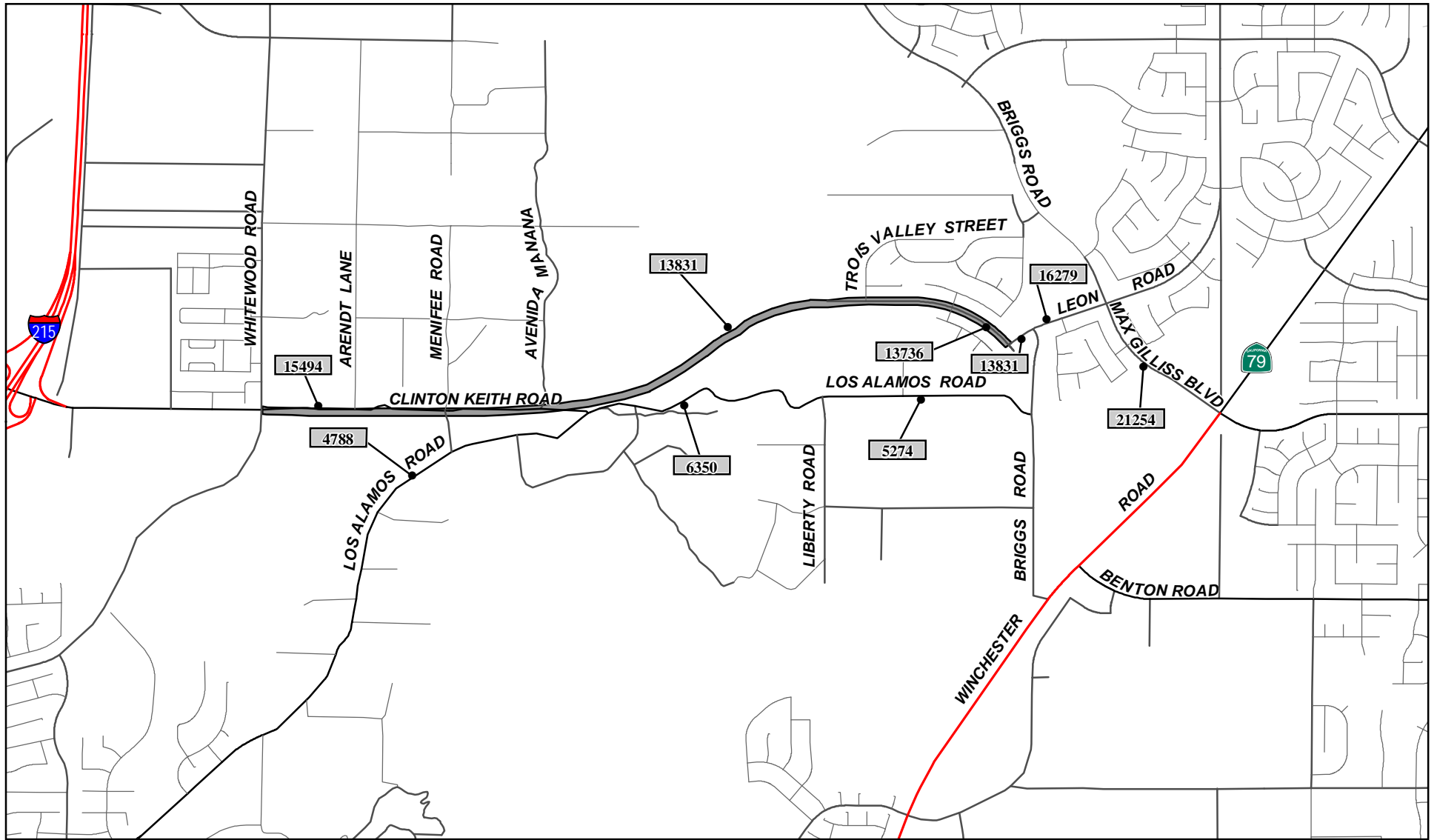
Legend

XXXX / XXXX AM / PM Peak Hour Volumes

2015 Update

Clinton Keith Road Extension Traffic Operations Analysis

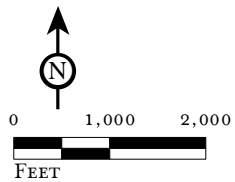
Opening Year With 2-Lanes Project Peak Hour Traffic Volumes



LSA

Legend

- Project Area
- 432 Average Daily Traffic Volumes



SOURCE: Riverside County, 2014.

FIGURE 10

*2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis*

Opening Year (2018) With 2-Lanes
Roadway Segment Daily Traffic Volumes

Opening Year (2018) Traffic Volumes With 4-Lane Design Option

RivTAM base year and future year model networks were modified to reflect the proposed roadway network under opening year (2018) with 4-lane design option. Raw traffic model data from RivTAM base and future year model runs were post-processed using NCHRP 255 methodologies to develop peak hour turning movement volumes at each study area intersection and roadway segments. The volume development methodology is described in Appendix C. Opening year (2018) with four lanes a.m. and p.m. peak hour traffic volumes at the study intersections are illustrated in Figure 11. Figure 12 illustrates the opening year (2018) with four lanes roadway segment volumes. Detailed volume development worksheets are contained in Appendix B.

Year 2035 Traffic Volumes

RivTAM base year and future year model networks currently reflect the proposed roadway network under year 2035 conditions with Clinton Keith Road proposed as a 6-lane roadway. The model was refined to include a greater level of detail to reflect existing and future land uses and network connections. Raw traffic model data from RivTAM base and future year model runs were post-processed using NCHRP 255 methodologies to develop peak-hour turning movement volumes at each study area intersection and roadway segments. The volume development methodology is described in Appendix C. Year 2035 a.m. and p.m. peak hour traffic volumes at the study intersections are illustrated in Figure 13. Figure 14 illustrates the year 2035 roadway segment volumes. Detailed volume development worksheets are contained in Appendix B.

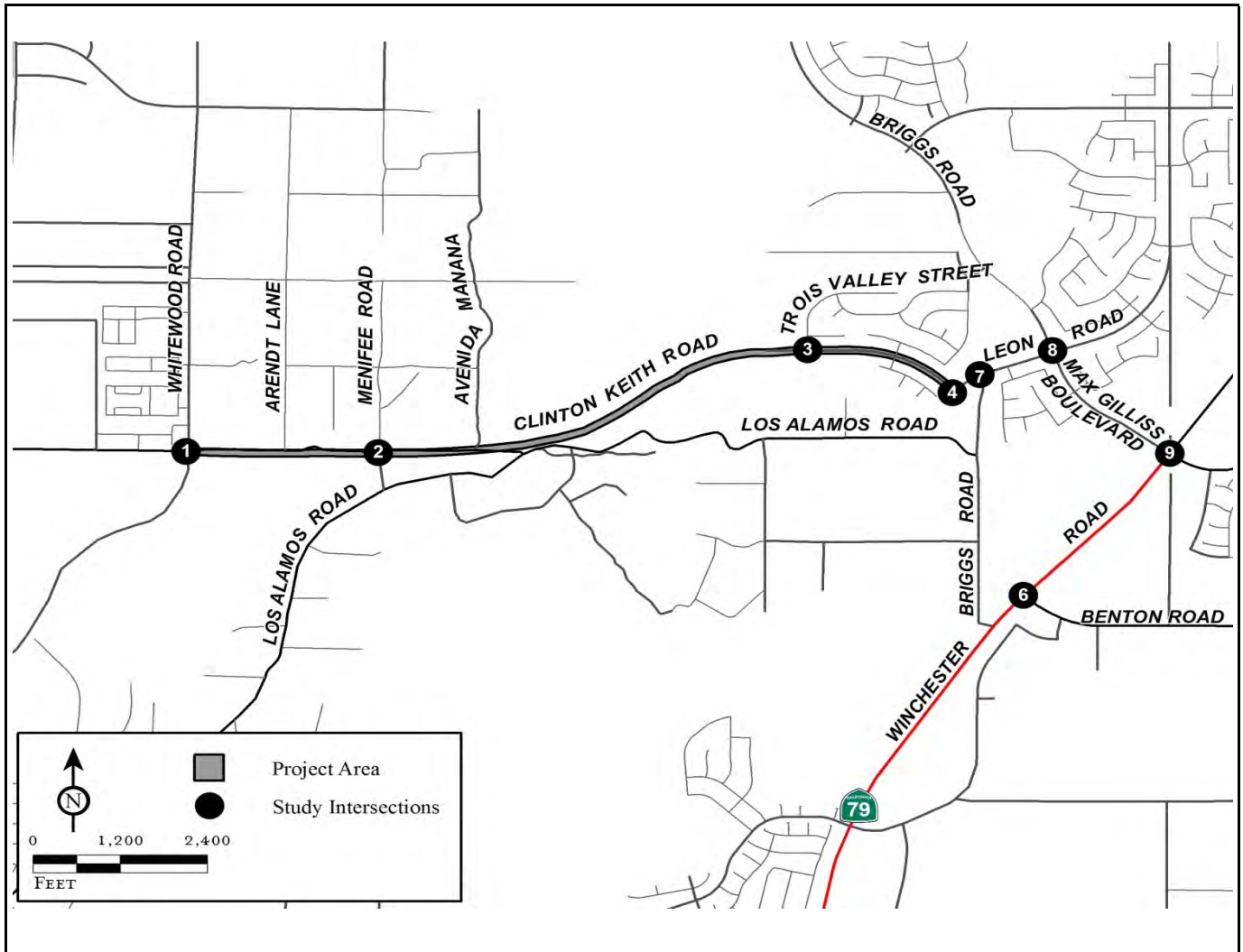
LEVEL OF SERVICE STANDARDS

Level of Service Definitions and Procedures

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of levels of service (which are defined using the letter grades A through F). These levels recognize that, while an absolute limit exists as to the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stall) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled Level of Service (LOS) E. Beyond LOS E, capacity has been exceeded, and arriving traffic will exceed the ability of the intersection to accommodate it. An upstream queue will then form and continue to expand in length until the demand volume again declines.

A complete description of the meaning of level of service can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual*. The Manual establishes levels of service A through F. Table A provides brief descriptions of the six levels of service, as abstracted from the Manual for intersections.

Table B provides brief descriptions of the six levels of service, as abstracted from the Manual for roadway segments.



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LSA

FIGURE 11

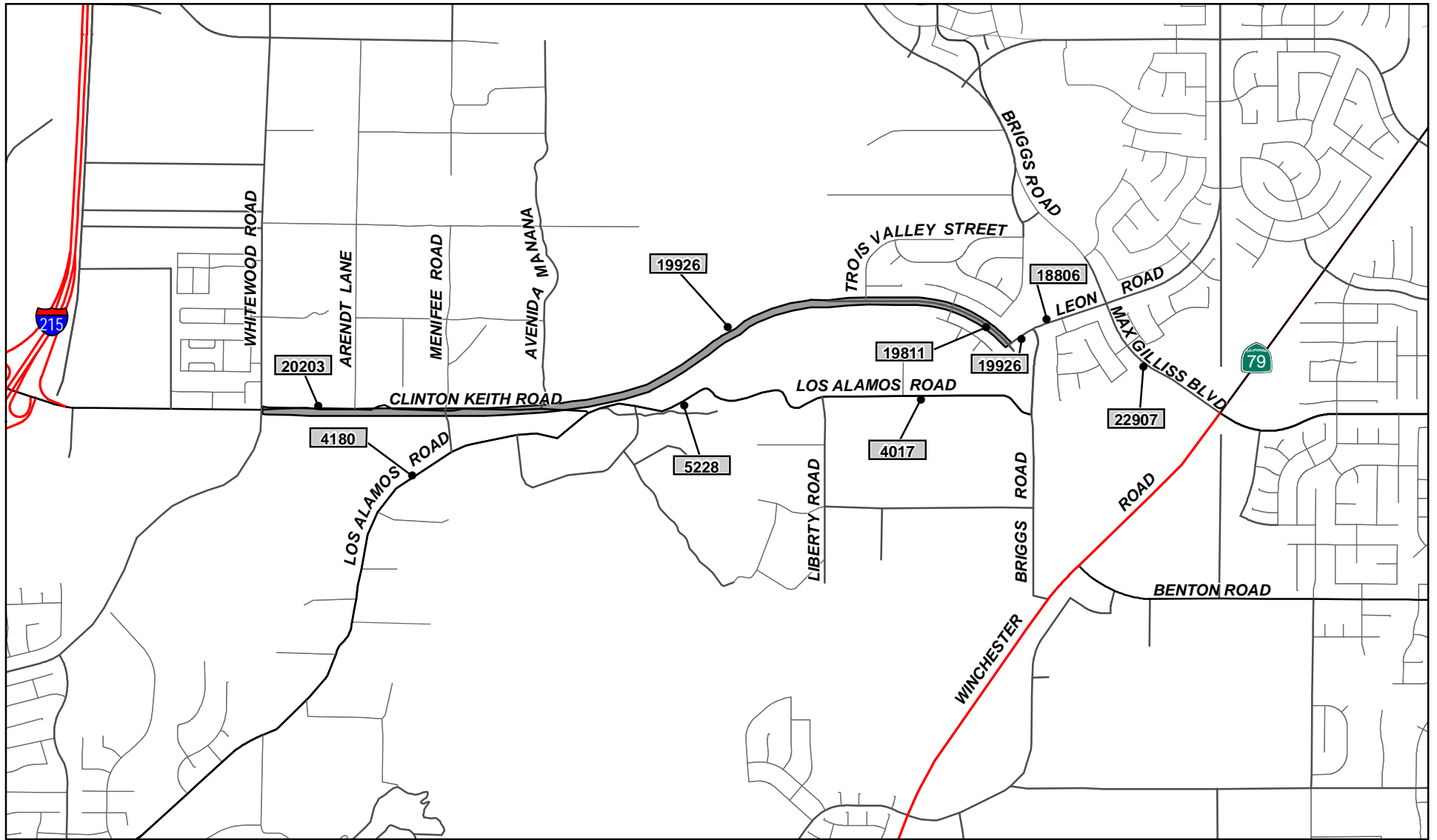
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XXXX / XXXX AM / PM Peak Hour Volumes

2015 Update

Clinton Keith Road Extension Traffic Operations Analysis

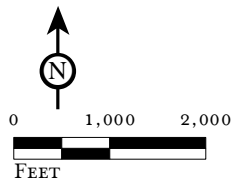
Opening Year With 4-Lanes Project Peak Hour Traffic Volumes



LSA

Legend

- Project Area
- 432 Average Daily Traffic Volumes



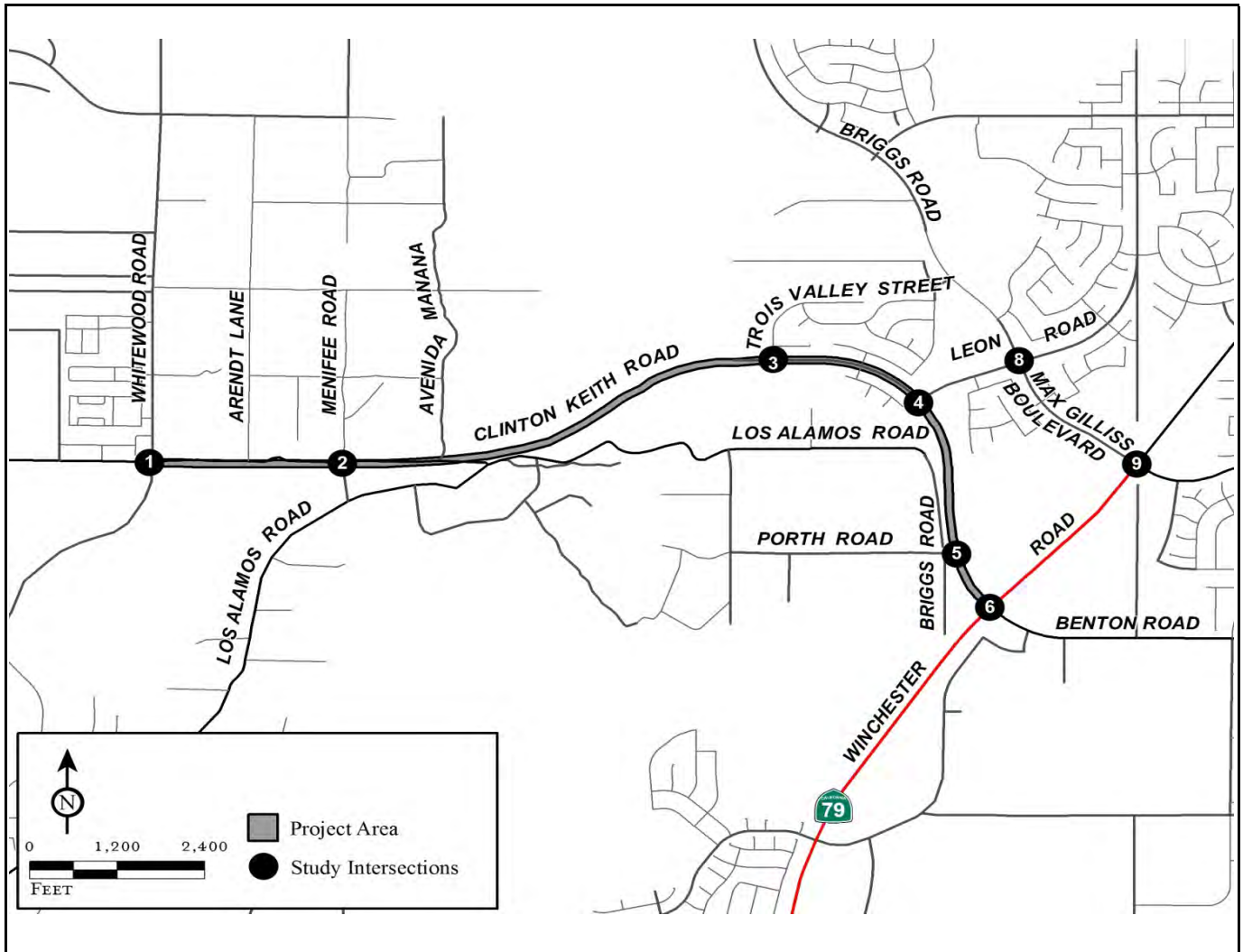
SOURCE: Riverside County, 2014.

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FIGURE 12

*2015 Update
Clinton Keith Road Extension
Traffic Operations Analysis*

Opening Year (2018) With 4-Lanes
Roadway Segment Daily Traffic Volumes



<table border="1"> <tr><td>113 / 137</td><td>↑</td><td>139 / 229</td></tr> <tr><td>281 / 200</td><td>↑</td><td>790 / 1198</td></tr> <tr><td>190 / 301</td><td>↑</td><td>290 / 231</td></tr> <tr><td>86 / 84</td><td>↓</td><td>169 / 222</td></tr> <tr><td>1391 / 902</td><td>↓</td><td>91 / 122</td></tr> <tr><td>181 / 157</td><td>↓</td><td>235 / 317</td></tr> </table>	113 / 137	↑	139 / 229	281 / 200	↑	790 / 1198	190 / 301	↑	290 / 231	86 / 84	↓	169 / 222	1391 / 902	↓	91 / 122	181 / 157	↓	235 / 317	<table border="1"> <tr><td>37 / 25</td><td>↑</td><td>16 / 24</td></tr> <tr><td>35 / 9</td><td>↑</td><td>1087 / 1457</td></tr> <tr><td>41 / 25</td><td>↑</td><td>152 / 71</td></tr> <tr><td>14 / 24</td><td>↓</td><td>95 / 176</td></tr> <tr><td>1674 / 1368</td><td>↓</td><td>4 / 8</td></tr> <tr><td>128 / 129</td><td>↓</td><td>86 / 116</td></tr> </table>	37 / 25	↑	16 / 24	35 / 9	↑	1087 / 1457	41 / 25	↑	152 / 71	14 / 24	↓	95 / 176	1674 / 1368	↓	4 / 8	128 / 129	↓	86 / 116	<table border="1"> <tr><td>19 / 13</td><td>↑</td><td>7 / 9</td></tr> <tr><td>17 / 11</td><td>↑</td><td>1236 / 1539</td></tr> <tr><td>5 / 32</td><td>↑</td><td></td></tr> <tr><td>1796 / 1477</td><td>↓</td><td></td></tr> </table>	19 / 13	↑	7 / 9	17 / 11	↑	1236 / 1539	5 / 32	↑		1796 / 1477	↓		<table border="1"> <tr><td>714 / 755</td><td>↑</td><td>290 / 488</td></tr> <tr><td>589 / 409</td><td>↑</td><td>560 / 811</td></tr> <tr><td>887 / 777</td><td>↑</td><td></td></tr> <tr><td>913 / 731</td><td>↓</td><td></td></tr> </table>	714 / 755	↑	290 / 488	589 / 409	↑	560 / 811	887 / 777	↑		913 / 731	↓		<table border="1"> <tr><td>30 / 25</td><td>↑</td><td>40 / 45</td></tr> <tr><td>1409 / 1093</td><td>↑</td><td>5 / 30</td></tr> <tr><td>48 / 52</td><td>↑</td><td>14 / 24</td></tr> <tr><td>16 / 38</td><td>↓</td><td>122 / 123</td></tr> <tr><td>7 / 17</td><td>↓</td><td>842 / 1246</td></tr> <tr><td>99 / 178</td><td>↓</td><td>6 / 33</td></tr> </table>	30 / 25	↑	40 / 45	1409 / 1093	↑	5 / 30	48 / 52	↑	14 / 24	16 / 38	↓	122 / 123	7 / 17	↓	842 / 1246	99 / 178	↓	6 / 33
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FIGURE 13

LSA

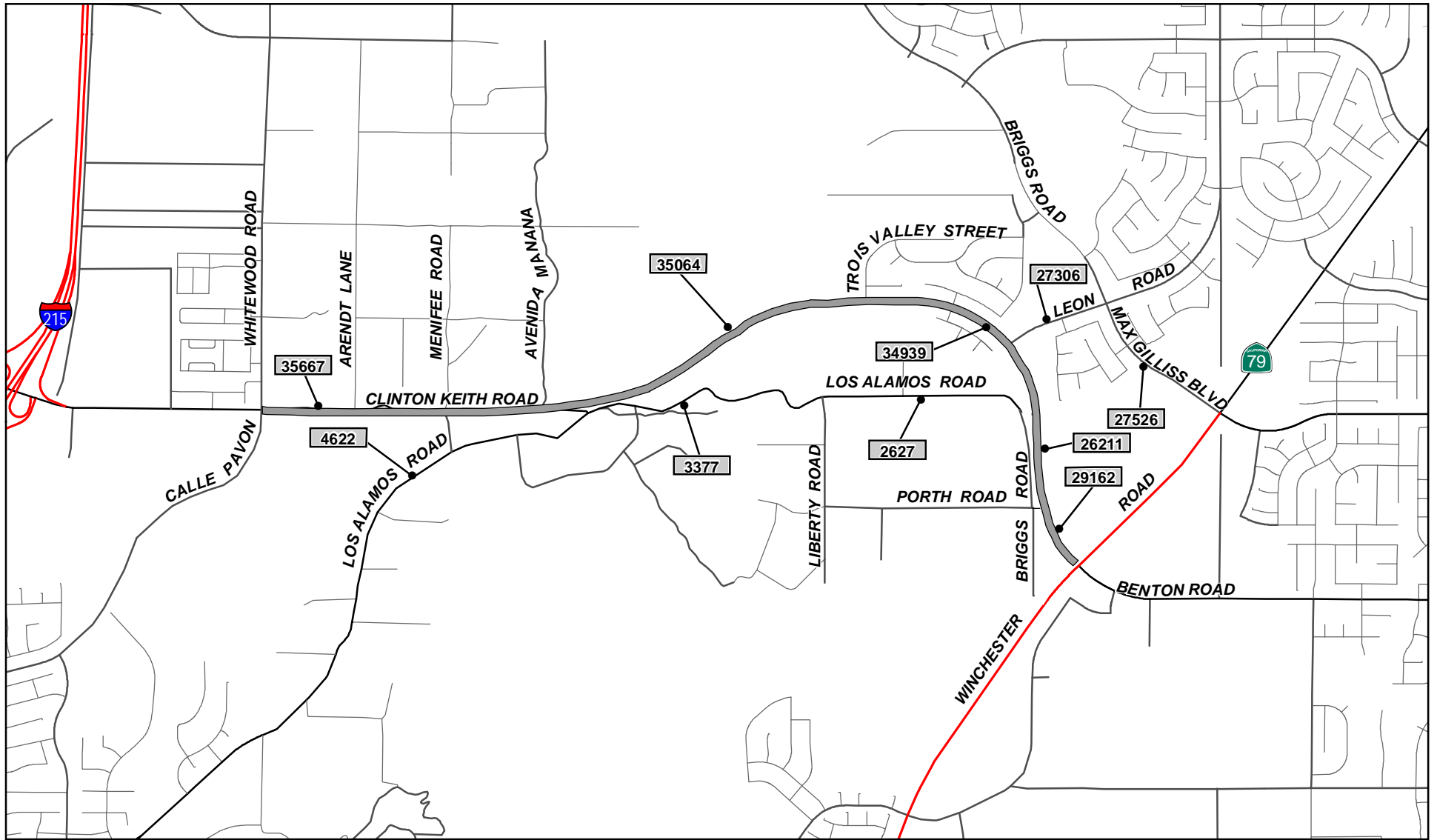
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XXXX / XXXX AM / PM Peak Hour Volumes

2015 Update

Clinton Keith Road Extension Traffic Operations Analysis

Year 2035 With 6-Lanes Project Peak Hour Traffic Volumes

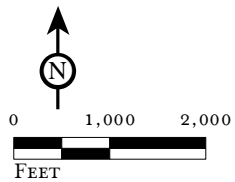


LSA

FIGURE 14

Legend

- Project Area
- 432 Average Daily Traffic Volumes



2015 Update
 Clinton Keith Road Extension
 Traffic Operations Analysis

Year (2035) With 6-Lanes
 Roadway Segment Daily Traffic Volumes

SOURCE: Riverside County, 2014.

Table A: Level of Service Definitions, Intersections

LOS	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Table B: Level of Service Definitions, Roadway Segments

LOS	Description
A	Describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control Delay at the boundary intersection is minimal. The travel speed exceeds 85% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
B	Describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary is not significant. The travel speed is between 67% and 85% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
C	Describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
D	Indicates a 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 intersection. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
E	Characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersection. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
F	Characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersection, as indicated by high delay and extensive queuing. The travel speed is between 30% or less of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

For all study area intersections, the 2000 *Highway Capacity Manual* (HCM 2000) analysis methodologies were used to determine intersection levels of service. Levels of service at all intersections were calculated using the Synchro software, which uses the HCM 2000 methodologies. HCM 2000 is being used for this study to maintain consistency with previous analyses.

Table C shows the level of service criteria for unsignalized and signalized intersections.

Table C: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

For all roadway segments, the roadway capacity is based on County of Riverside General Plan Circulation Element, *Figure C-3 Link/Volume Capacity Level of Service for Riverside County Roadways*. The roadway segment LOS is based on the City of Murrieta General Plan *Table 5.4-4 Roadway Segment LOS Criteria*. Appendix C shows the roadway capacity and roadway segments LOS tables.

Level of Service Threshold Criteria

The Clinton Keith Extension project is within the unincorporated County of Riverside and City of Murrieta jurisdictions as shown in previously referenced Figure 1. The County considers LOS D as an acceptable level of service for intersections and roadway segments. The City considers LOS C as an acceptable level of service for roadway segments and LOS D for intersections. SR 79 is a designated Riverside County Congestion Management Program (CMP) facility. Based on the CMP, the minimum LOS standard for intersections and segments along the CMP system of Highways and Roadways shall be E unless the intersection or segment had a lower LOS (F) in 1991. Therefore, this analysis considers LOS E as the LOS standard for all study intersections on SR 79.

EXISTING LEVEL OF SERVICE

Existing traffic volumes for the study intersections were developed using the methodology described in the “Traffic Volume Development” section. Previously referenced Figure 5 illustrates the existing a.m. and p.m. peak hour traffic volumes at the key study area intersections. A level of service analysis was conducted to evaluate current circulation system performance. The LOS calculation worksheets are provided in Appendix D. Table D summarizes the existing a.m. and p.m. peak hour levels of service at the study area intersections and indicates that all study area intersections are currently operating at satisfactory levels of service.

Table D - Existing Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Whitewood Road/Clinton Keith Road	Signal	26.5	C	30.9	C
2 . Menifee Road/Clinton Keith Road	TWSC	8.9	A	8.9	A
3 . Trois Valley Street/Clinton Keith Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
4 . Clinton Keith Road/Leon Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
5 . Porth Road/Clinton Keith Road	-	<i>Future Intersection</i>		<i>Future Intersection</i>	
6 . SR-79/Clinton Keith Road-Benton Road	Signal	16.6	B	21.9	C
7 . Briggs Road/Leon Road	TWSC	13.7	B	18.5	C
8 . Max Gillis Boulevard/Leon Road	Signal	26.9	C	24.7	C
9 . SR-79 /Max Gillis Boulevard	Signal	52.0	D	35.6	D

Notes:

TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

Table E shows the existing daily roadway segment volumes and levels of service and demonstrates that all study area roadway segments are currently operating at satisfactory levels of service in the existing condition.

OPENING YEAR (2018) LEVEL OF SERVICE

Opening year (2018) traffic volumes for the intersections within the study area were developed using the methodology described in the “Traffic Volume Development” section, above.

Opening Year (2018) Without Project

Previously referenced Figure 7 illustrates the opening year (2018) without project a.m. and p.m. peak hour traffic volumes at the study area intersections. A level of service analysis was conducted to assess opening year (2018) without project traffic conditions. The LOS calculation worksheets are provided in Appendix D. Table F summarizes opening year (2018) without project a.m. and p.m. peak hour levels of service at the study area intersections and demonstrates that all intersections are forecast to operate at satisfactory levels of service.

Table G shows the opening year (2018) without project daily roadway segment volumes and levels of service. As shown in Table G, all study area roadway segments are forecast to operate at satisfactory levels of service in the opening year without project condition.

Opening Year (2018) With 2-Lane Design Option

Previously referenced Figure 11 illustrates the opening year (2018) with two lanes a.m. and p.m. peak hour traffic volumes at the study area intersections. A level of service analysis was conducted to assess opening year (2018) with two lanes traffic conditions. LOS worksheets are provided in Appendix C. Table H summarizes opening year (2018) with two lanes a.m. and p.m. peak hour levels of service for the study area intersections and shows all study area intersections are forecast to operate at satisfactory levels of service with the exception of Menifee Road/Clinton Keith Road. The minor street approach on Menifee Road will experience longer delays while Clinton Keith Road will operate acceptably. While a signal is planned at the intersection, timing of the installation will be dependent on development activity and signal warrants being met. The intersection will be monitored by the local agencies. When the traffic signal is installed at this intersection, it will operate at a satisfactory LOS.

Table I shows the opening year (2018) with two lanes daily roadway segment volumes and levels of service. As shown in Table I, all study area roadway segments are forecast to operate at satisfactory levels of service with the exception of the segment on Clinton Keith Road between Whitewood Road and Menifee Road, which operates at LOS D.

Opening Year (2018) With 4-Lane Design Option

Previously referenced Figure 13 illustrates the opening year (2018) with four lanes a.m. and p.m. peak hour traffic volumes at the study area intersections. A level of service analysis was conducted to assess opening year (2018) with four lanes traffic conditions. LOS worksheets are provided in

Table E: Existing Roadway Segment Levels of Service

Roadway (General Plan Designation)	Segment	Functional Classification ⁽¹⁾	Maximum Two-Way Capacity ⁽²⁾	Existing		
				Volume	V/C	LOS ⁽³⁾
Clinton Keith Road (6 Lane Urban Arterial)	Between Whitewood Road and Menifee Road	2 Lane Collector	13,000	374	0.029	A
	Between Menifee Road and Trois Valley Street	<i>Future Roadway Segment</i>	-	-	-	-
	Between Trois Valley Street and Leon Road	4 Lane Arterial	35,900	1,181	0.033	A
	Between Leon Road and Porth Road	<i>Future Roadway Segment</i>	-	-	-	-
	Between Porth Road and SR-79	<i>Future Roadway Segment</i>	-	-	-	-
Leon Road (4 Lane Major Roadway)	Between Clinton Keith Road and Briggs Road	4 Lane Major	34,100	1,181	0.035	A
	Between Briggs Road and Max Gillis Boulevard	4 Lane Major	34,100	8,517	0.250	A
Max Gillis Boulevard (4 Lane Major Roadway)	Between Leon Road and SR-79	4 Lane Major	34,100	14,938	0.438	A
Los Alamos Road (Non-General Plan Roadway)	West of Menifee Road	2 Lane Collector	13,000	8,571	0.659	B
	Between Menifee Road and Liberty Lane	2 Lane Collector	13,000	8,425	0.648	B
	Between Liberty Lane and Briggs Road	2 Lane Collector	13,000	8,406	0.647	B

Notes:

- (1) Functional classifications are used to determine capacity based on existing characteristics and function.
 - (2) Link/Volume Capacity/Level of Service for Riverside County Roadways based on Riverside County Traffic Impact Guidelines, Figure C-3, Riverside County General Plan.
 - (3) LOS based on V/C from City of Murrieta General Plan.
- V/C - Volume to Capacity

Table F - Opening Year (2018) Without Project Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Whitewood Road/Clinton Keith Road	Signal	27.2	C	30.1	C
2 . Menifee Road/Clinton Keith Road	TWSC	9.0	A	8.9	A
3 . Trois Valley Street/Clinton Keith Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
4 . Clinton Keith Road/Leon Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
5 . Porth Road/Clinton Keith Road	-	<i>Future Intersection</i>		<i>Future Intersection</i>	
6 . SR-79/Clinton Keith Road-Benton Road	Signal	17.7	B	26.0	C
7 . Briggs Road/Leon Road	TWSC	14.4	B	21.0	C
8 . Max Gillis Boulevard/Leon Road	Signal	27.5	C	25.4	C
9 . SR-79 /Max Gillis Boulevard	Signal	41.2	D	25.9	C

Notes:

TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

* Exceeds LOS standard

Table G: Opening Year (2018) Without Project Roadway Segment Levels of Service

Roadway (General Plan Designation)	Segment	Functional Classification ⁽¹⁾	Maximum Two-Way Capacity ⁽²⁾	Opening Year (2018)		
				Volume	V/C	LOS ⁽³⁾
Clinton Keith Road (6 Lane Urban Arterial)	Between Whitewood Road and Menifee Road	2 Lane Collector	13,000	443	0.034	A
	Between Menifee Road and Trois Valley Street	<i>Future Roadway Segment</i>	-	-	-	-
	Between Trois Valley Street and Leon Road	4 Lane Arterial	35,900	1,181	0.033	A
	Between Leon Road and Porth Road	<i>Future Roadway Segment</i>	-	-	-	-
	Between Porth Road and SR-79	<i>Future Roadway Segment</i>	-	-	-	-
Leon Road (4 Lane Major Roadway)	Between Clinton Keith Road and Briggs Road	4 Lane Major	34,100	1,181	0.035	A
	Between Briggs Road and Max Gillis Boulevard	4 Lane Major	34,100	9,064	0.266	A
Max Gillis Boulevard (4 Lane Major Roadway)	Between Leon Road and SR-79	4 Lane Major	34,100	17,702	0.519	A
Los Alamos Road (Non-General Plan Roadway)	West of Menifee Road	2 Lane Collector	13,000	10,163	0.782	C
	Between Menifee Road and Liberty Lane	2 Lane Collector	13,000	9,990	0.768	C
	Between Liberty Lane and Briggs Road	2 Lane Collector	13,000	9,968	0.767	C

Notes:

- (1) Functional classifications are used to determine capacity based on existing characteristics and function.
 - (2) Link/Volume Capacity/Level of Service for Riverside County Roadways based on Riverside County Traffic Impact Guidelines, Figure C-3, Riverside County General Plan.
 - (3) LOS based on V/C from City of Murrieta General Plan.
- V/C - Volume to Capacity

Table H - Opening Year (2018) With 2-Lanes Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Whitewood Road/Clinton Keith Road	Signal	28.5	C	32.1	C
2 . Menifee Road/Clinton Keith Road	TWSC	965.5	F *	751.9	F *
	Signal**	26.1	C	24.2	C
3 . Trois Valley Street/Clinton Keith Road	Signal	7.0	A	8.2	A
4 . Clinton Keith Road/Leon Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
5 . Porth Road/Clinton Keith Road	-	<i>Future Intersection</i>		<i>Future Intersection</i>	
6 . SR-79/Clinton Keith Road-Benton Road	Signal	18.1	B	26.1	C
7 . Briggs Road/Leon Road	TWSC	13.1	B	16.2	C
8 . Max Gillis Boulevard/Leon Road	Signal	31.8	C	24.5	C
9 . SR-79 /Max Gillis Boulevard	Signal	46.7	D	35.5	D

Notes:

TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

* Exceeds LOS standard

** LOS F is for minor street approaches on Menifee Road, primarily the northbound approach. Approaches on Clinton Keith Road operate at LOS A. Signal will be installed as part of Clinton Keith Road Extension Project at a later phase when warranted.

Table I: Opening Year (2018) With 2-Lanes Roadway Segment Levels of Service

Roadway (General Plan Designation)	Segment	Functional Classification ⁽¹⁾	Maximum Two-Way Capacity ⁽²⁾	Opening Year (2018)		
				Volume	V/C	LOS ⁽³⁾
Clinton Keith Road (6 Lane Urban Arterial)	Between Whitewood Road and Menifee Road	2 Lane Arterial	18,000	15,494	0.861	D
	Between Menifee Road and Trois Valley Street	2 Lane Arterial	18,000	13,831	0.768	C
	Between Trois Valley Street and Leon Road	2 Lane Arterial	18,000	13,736	0.763	C
	Between Leon Road and Porth Road	<i>Future Roadway Segment</i>	-	-	-	-
	Between Porth Road and SR-79	<i>Future Roadway Segment</i>	-	-	-	-
Leon Road (4 Lane Major Roadway)	Between Clinton Keith Road and Briggs Road	4 Lane Major	34,100	13,831	0.406	A
	Between Briggs Road and Max Gillis Boulevard	4 Lane Major	34,100	16,279	0.477	A
Max Gillis Boulevard (4 Lane Major Roadway)	Between Leon Road and SR-79	4 Lane Major	34,100	21,254	0.623	B
Los Alamos Road (Non-General Plan Roadway)	West of Menifee Road	2 Lane Collector	13,000	4,788	0.368	A
	Between Menifee Road and Liberty Lane	2 Lane Collector	13,000	6,350	0.488	A
	Between Liberty Lane and Briggs Road	2 Lane Collector	13,000	5,274	0.406	A

Notes:

- (1) Functional classifications are used to determine capacity based on existing characteristics and function for all roadways or based on proposed improvements for Clinton Keith Road.
- (2) Link/Volume Capacity/Level of Service for Riverside County Roadways based on Riverside County Traffic Impact Guidelines, Figure C-3, Riverside County General Plan.
- (3) LOS based on V/C from City of Murrieta General Plan.

V/C - Volume to Capacity

Bold = Unsatisfactory Level Of Service. It needs to be noted that the County considers LOS D acceptable.

Appendix C. Table J summarizes opening year (2018) with four lanes a.m. and p.m. peak hour levels of service for the study area intersections and demonstrates that all study area intersections are projected to operate at satisfactory levels of service. It was determined that, due to higher volumes and the additional width of Clinton Keith Road, a signal at Clinton Keith Road/Menifee Road is necessary at project opening if the 4-lane design option is built.

Table K shows the opening year (2018) with four lanes daily roadway segment volumes and levels of service. As shown in Table K, all study area roadway segments are forecast to operate at satisfactory levels of service.

YEAR 2035 LEVEL OF SERVICE

Previously referenced Figure 7 illustrates the year 2035 with six lanes a.m. and p.m. peak hour traffic volumes at the study area intersections. A level of service analysis was conducted to assess year 2035 with six lanes traffic conditions. LOS worksheets are provided in Appendix C. Table L summarizes year 2035 with six lanes a.m. and p.m. peak hour levels of service for the study area intersections. As shown in Table L, all study area intersections are projected to operate at satisfactory levels of service.

Table M shows the year 2035 with six lanes daily roadway segment volumes and levels of service and shows all study area roadway segments are forecast to operate at satisfactory levels of service.

SUMMARY AND CONCLUSIONS

This section of the report summarizes the results and conclusions of the traffic analysis performed to assess the interim traffic conditions for the proposed phased construction of the Clinton Keith Road Extension Project.

The analysis includes examination of a.m. and p.m. peak hour traffic operations under the following conditions:

- Existing (2014) conditions;
- Opening year (2018) without project conditions;
- Opening year (2018) with two lanes conditions;
- Opening year (2018) with four lanes conditions; and
- Year 2035 with six lanes conditions.

Under existing and opening year without project conditions, all study intersections and roadway segments are forecast to operate satisfactorily.

Under opening year (2018) with two lanes conditions, all roadway segments and intersections operate at satisfactory levels of service under County and CMP criteria. While the City of Murrieta strives for LOS C condition for roadway segments, in this case, LOS D on Clinton Keith Road between Whitewood Road and Menifee Road is considered acceptable for an interim period. Under year 2035 with six lanes conditions, all study intersections and roadway segments operate at satisfactory levels of service.

Table J - Opening Year (2018) With 4-Lanes Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Whitewood Road/Clinton Keith Road	Signal	35.4	D	32.4	C
2 . Menifee Road/Clinton Keith Road	Signal	21.2	C	16.8	B
3 . Trois Valley Street/Clinton Keith Road	Signal	6.8	A	8.1	A
4 . Clinton Keith Road/Leon Road	-	<i>No Conflicting Movement</i>		<i>No Conflicting Movement</i>	
5 . Porth Road/Clinton Keith Road	-	<i>Future Intersection</i>		<i>Future Intersection</i>	
6 . SR-79/Clinton Keith Road-Benton Road	Signal	18.1	B	35.7	D
7 . Briggs Road/Leon Road	TWSC	15.7	C	18.2	C
8 . Max Gillis Boulevard/Leon Road	Signal	33.9	C	24.6	C
9 . SR-79 /Max Gillis Boulevard	Signal	48.1	D	36.3	D

Notes:

TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

Table K: Opening Year (2018) With 4-Lanes Roadway Segment Levels of Service

Roadway (General Plan Designation)	Segment	Functional Classification ⁽¹⁾	Maximum Two-Way Capacity ⁽²⁾	Opening Year (2018)		
				Volume	V/C	LOS ⁽³⁾
Clinton Keith Road (6 Lane Urban Arterial)	Between Whitewood Road and Menifee Road	4 Lane Arterial	35,900	20,203	0.563	A
	Between Menifee Road and Trois Valley Street	4 Lane Arterial	35,900	19,926	0.555	A
	Between Trois Valley Street and Leon Road	4 Lane Arterial	35,900	19,811	0.552	A
	Between Leon Road and Porth Road	<i>Future Roadway Segment</i>	-	-	-	-
	Between Porth Road and SR-79	<i>Future Roadway Segment</i>	-	-	-	-
Leon Road (4 Lane Major Roadway)	Between Clinton Keith Road and Briggs Road	4 Lane Major	34,100	19,926	0.584	A
	Between Briggs Road and Max Gillis Boulevard	4 Lane Major	34,100	18,806	0.551	A
Max Gillis Boulevard (4 Lane Major Roadway)	Between Leon Road and SR-79	4 Lane Major	34,100	22,907	0.672	B
Los Alamos Road (Non-General Plan Roadway)	West of Menifee Road	2 Lane Collector	13,000	4,180	0.322	A
	Between Menifee Road and Liberty Lane	2 Lane Collector	13,000	5,228	0.402	A
	Between Liberty Lane and Briggs Road	2 Lane Collector	13,000	4,017	0.309	A

Notes:

- (1) Functional classifications are used to determine capacity based on existing characteristics and function for all roadways or based on proposed improvements for Clinton Keith Road.
 - (2) Link/Volume Capacity/Level of Service for Riverside County Roadways based on Riverside County Traffic Impact Guidelines, Figure C-3, Riverside County General Plan.
 - (3) LOS based on V/C from City of Murrieta General Plan.
- V/C - Volume to Capacity

Table L - Year 2035 With 6-Lanes Intersection Levels of Service

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Whitewood Road/Clinton Keith Road	Signal	34.5	C	32.4	C
2 . Menifee Road/Clinton Keith Road	Signal	23.8	C	19.1	B
3 . Trois Valley Street/Clinton Keith Road	Signal	9.0	A	10.1	B
4 . Clinton Keith Road/Leon Road	Signal	30.1	C	19.0	B
5 . Porth Road/Clinton Keith Road	Signal	11.4	B	15.3	B
6 . SR-79/Clinton Keith Road-Benton Road	Signal	47.2	D	50.6	D
7 . Briggs Road/Leon Road	-	<i>Not a Part</i>		<i>Not a Part</i>	
8 . Max Gillis Boulevard/Leon Road	Signal	40.7	D	27.2	C
9 . SR-79 /Max Gillis Boulevard	Signal	44.4	D	47.1	D

Notes:

LOS = Level of Service

Table M: Year 2035 With 6-Lanes Roadway Segment Levels of Service

Roadway (General Plan Designation)	Segment	Functional Classification ⁽¹⁾	Maximum Two-Way Capacity ⁽²⁾	Year 2035		
				Volume	V/C	LOS ⁽³⁾
Clinton Keith Road (6 Lane Urban Arterial)	Between Whitewood Road and Menifee Road	6 Lane Arterial	53,900	35,667	0.662	B
	Between Menifee Road and Trois Valley Street	6 Lane Arterial	53,900	35,064	0.651	B
	Between Trois Valley Street and Leon Road	6 Lane Arterial	53,900	34,939	0.648	B
	Between Leon Road and Porth Road	6 Lane Arterial	53,900	26,211	0.486	A
	Between Porth Road and SR-79	6 Lane Arterial	53,900	29,162	0.541	A
Leon Road (4 Lane Major Roadway)	Between Clinton Keith Road and Max Gillis Boulevard	4 Lane Major	34,100	27,306	0.801	D
Max Gillis Boulevard (4 Lane Major Roadway)	Between Leon Road and SR-79	4 Lane Major	34,100	27,526	0.807	D
Los Alamos Road (Non-General Plan Roadway)	West of Menifee Road	2 Lane Collector	13,000	4,622	0.356	A
	Between Menifee Road and Liberty Lane	2 Lane Collector	13,000	3,377	0.260	A
	Between Liberty Lane and Briggs Road	2 Lane Collector	13,000	2,627	0.202	A

Notes:

- (1) Functional classifications are used to determine capacity based on existing characteristics and function for all roadways or based on proposed improvements for Clinton Keith Road.
- (2) Link/Volume Capacity/Level of Service for Riverside County Roadways based on Riverside County Traffic Impact Guidelines, Figure C-3, Riverside County General Plan.
- (3) LOS based on V/C from City of Murrieta General Plan.

V/C - Volume to Capacity

Under 2018 with four lanes conditions, all segments and intersections on Clinton Keith Road are projected to operate acceptably and the interim project will have no significant impacts.

The phased construction of the Clinton Keith Road extension will have no significant impact on Leon Road, Max Gillis Boulevard or Los Alamos Road under either the 2-lane design option or 4-lane design option. Los Alamos Road will experience a decrease in traffic volume (approximately 3,650 vehicles) with the 2-lane design option and will experience a slightly larger decrease in volume (approximately 4,762 vehicles) with the 4-lane interim Clinton Keith Road design option.

It has been further demonstrated that, at the completion of the 6-lane Clinton Keith Road Extension Project, all study area roadway and segments will operate acceptably as previously determined in the SEIR.

APPENDIX A

TRAFFIC COUNT SHEETS

County of Riverside
 N/S: Winchester Road
 E/W: Benton Road
 Weather: Clear

File Name : CRVWIBeam
 Site Code : 02514386
 Start Date : 10/29/2014
 Page No : 1

Groups Printed- Total Volume

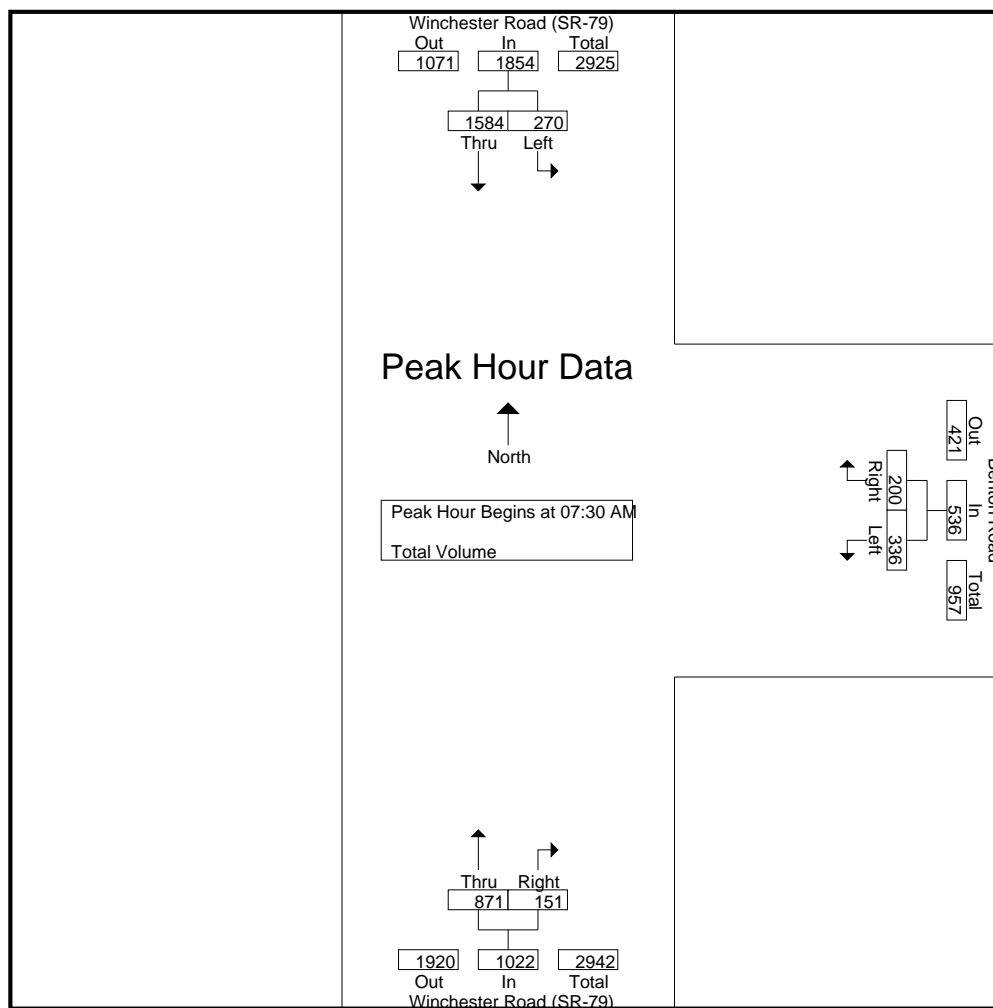
Start Time	Winchester Road (SR-79) Southbound			Benton Road Westbound			Winchester Road (SR-79) Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	65	316	381	108	47	155	155	38	193	729
07:15 AM	65	370	435	90	54	144	163	40	203	782
07:30 AM	61	424	485	83	51	134	271	50	321	940
07:45 AM	68	388	456	92	55	147	205	31	236	839
Total	259	1498	1757	373	207	580	794	159	953	3290
08:00 AM	62	381	443	73	51	124	211	30	241	808
08:15 AM	79	391	470	88	43	131	184	40	224	825
08:30 AM	67	372	439	89	61	150	215	45	260	849
08:45 AM	83	326	409	96	50	146	196	64	260	815
Total	291	1470	1761	346	205	551	806	179	985	3297
Grand Total	550	2968	3518	719	412	1131	1600	338	1938	6587
Apprch %	15.6	84.4		63.6	36.4		82.6	17.4		
Total %	8.3	45.1	53.4	10.9	6.3	17.2	24.3	5.1	29.4	

Start Time	Winchester Road (SR-79) Southbound			Benton Road Westbound			Winchester Road (SR-79) Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	61	424	485	83	51	134	271	50	321	940
07:45 AM	68	388	456	92	55	147	205	31	236	839
08:00 AM	62	381	443	73	51	124	211	30	241	808
08:15 AM	79	391	470	88	43	131	184	40	224	825
Total Volume	270	1584	1854	336	200	536	871	151	1022	3412
% App. Total	14.6	85.4		62.7	37.3		85.2	14.8		
PHF	.854	.934	.956	.913	.909	.912	.804	.755	.796	.907

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

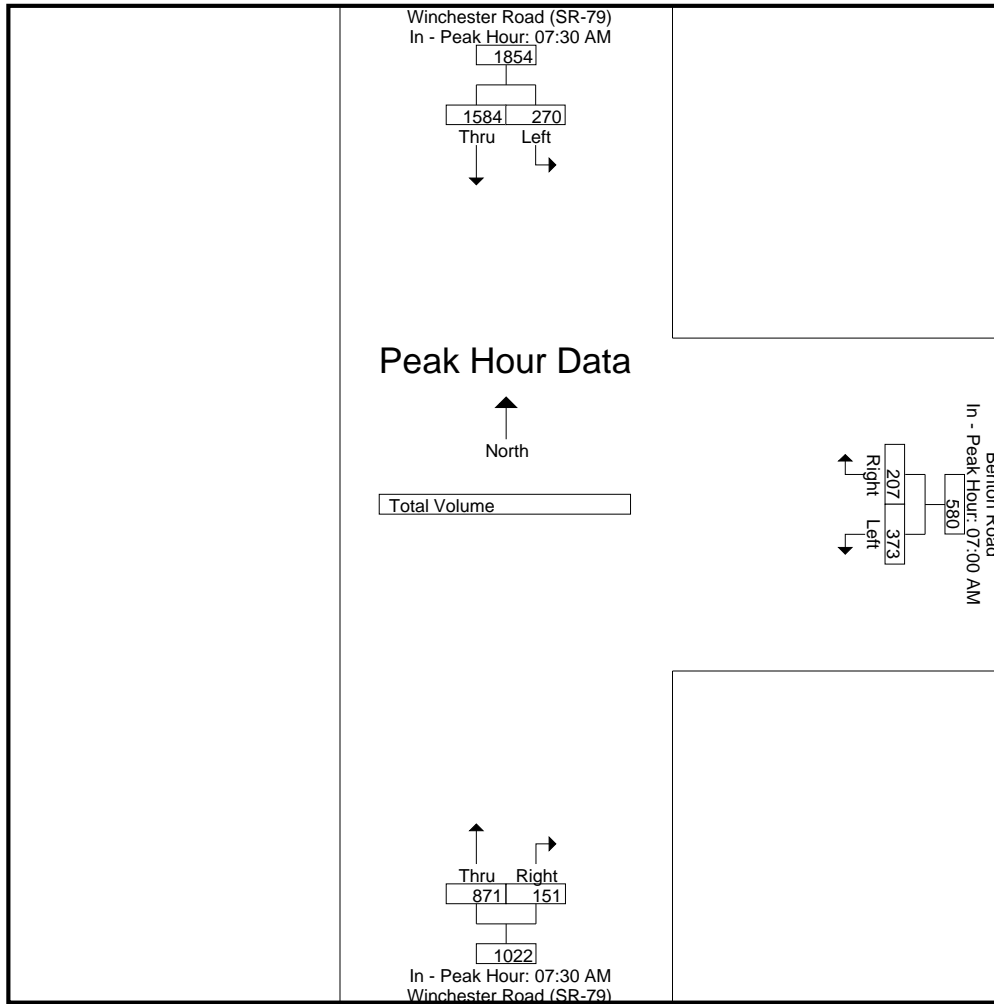
County of Riverside
 N/S: Winchester Road
 E/W: Benton Road
 Weather: Clear

File Name : CRVWIBeam
 Site Code : 02514386
 Start Date : 10/29/2014
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:00 AM			07:30 AM		
+0 mins.	61	424	485	108	47	155	271	50	321
+15 mins.	68	388	456	90	54	144	205	31	236
+30 mins.	62	381	443	83	51	134	211	30	241
+45 mins.	79	391	470	92	55	147	184	40	224
Total Volume	270	1584	1854	373	207	580	871	151	1022
% App. Total	14.6	85.4		64.3	35.7		85.2	14.8	
PHF	.854	.934	.956	.863	.941	.935	.804	.755	.796



County of Riverside
 N/S: Winchester Road
 E/W: Benton Road
 Weather: Clear

File Name : CRVWIBEPM
 Site Code : 02514386
 Start Date : 10/8/2014
 Page No : 1

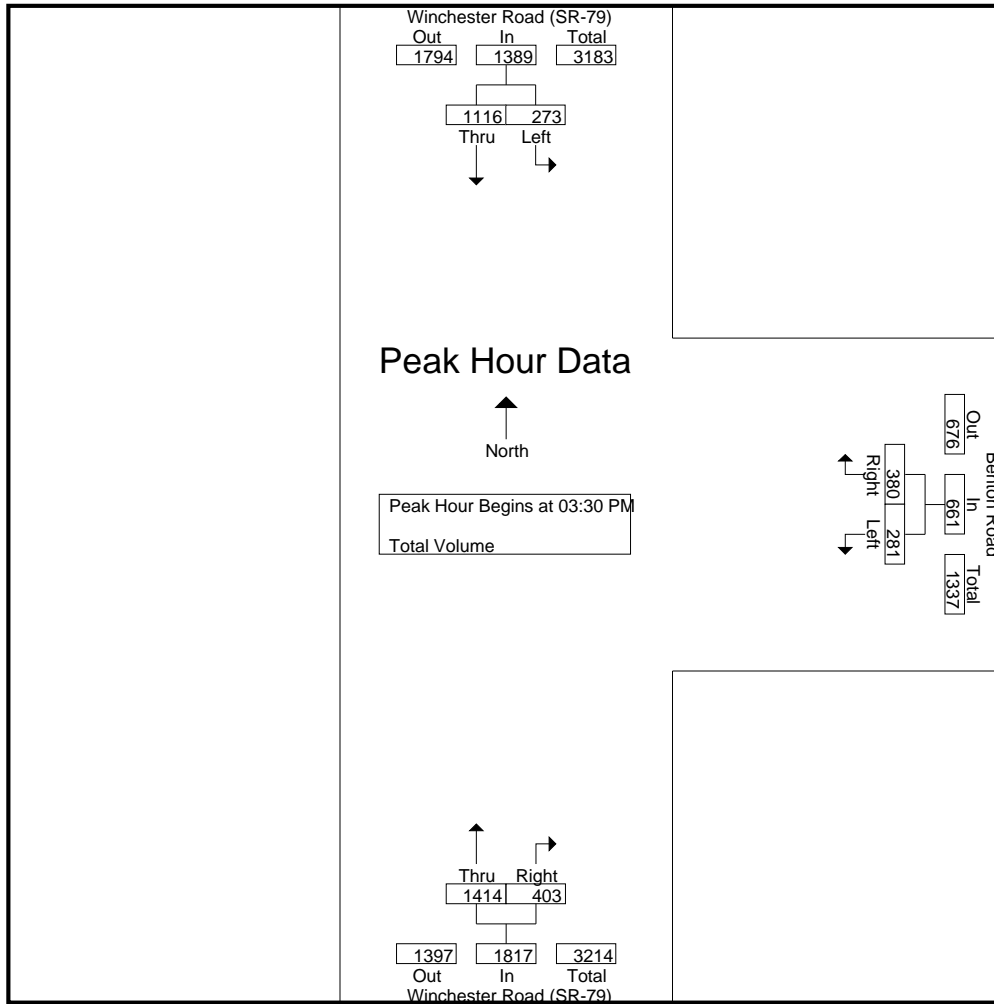
Groups Printed- Total Volume

Start Time	Winchester Road (SR-79) Southbound			Benton Road Westbound			Winchester Road (SR-79) Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	39	232	271	62	98	160	353	113	466	897
03:15 PM	55	224	279	57	70	127	348	90	438	844
03:30 PM	64	324	388	77	99	176	362	102	464	1028
03:45 PM	85	323	408	70	107	177	355	105	460	1045
Total	243	1103	1346	266	374	640	1418	410	1828	3814
04:00 PM	57	219	276	61	86	147	348	98	446	869
04:15 PM	67	250	317	73	88	161	349	98	447	925
04:30 PM	65	243	308	83	105	188	398	85	483	979
04:45 PM	62	267	329	54	98	152	305	98	403	884
Total	251	979	1230	271	377	648	1400	379	1779	3657
05:00 PM	70	266	336	60	105	165	364	91	455	956
05:15 PM	59	255	314	81	103	184	385	115	500	998
05:30 PM	82	231	313	62	96	158	395	116	511	982
05:45 PM	63	210	273	69	91	160	317	97	414	847
Total	274	962	1236	272	395	667	1461	419	1880	3783
Grand Total	768	3044	3812	809	1146	1955	4279	1208	5487	11254
Apprch %	20.1	79.9		41.4	58.6		78	22		
Total %	6.8	27	33.9	7.2	10.2	17.4	38	10.7	48.8	

Start Time	Winchester Road (SR-79) Southbound			Benton Road Westbound			Winchester Road (SR-79) Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	64	324	388	77	99	176	362	102	464	1028
03:45 PM	85	323	408	70	107	177	355	105	460	1045
04:00 PM	57	219	276	61	86	147	348	98	446	869
04:15 PM	67	250	317	73	88	161	349	98	447	925
Total Volume	273	1116	1389	281	380	661	1414	403	1817	3867
% App. Total	19.7	80.3		42.5	57.5		77.8	22.2		
PHF	.803	.861	.851	.912	.888	.934	.977	.960	.979	.925

County of Riverside
 N/S: Winchester Road
 E/W: Benton Road
 Weather: Clear

File Name : CRVWIBEPM
 Site Code : 02514386
 Start Date : 10/8/2014
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	03:30 PM			04:30 PM			05:00 PM		
+0 mins.	64	324	388	83	105	188	364	91	455
+15 mins.	85	323	408	54	98	152	385	115	500
+30 mins.	57	219	276	60	105	165	395	116	511
+45 mins.	67	250	317	81	103	184	317	97	414
Total Volume	273	1116	1389	278	411	689	1461	419	1880
% App. Total	19.7	80.3		40.3	59.7		77.7	22.3	
PHF	.803	.861	.851	.837	.979	.916	.925	.903	.920

County of Riverside
 N/S: Briggs Road West
 E/W: Leon Road
 Weather: Clear

File Name : CRVBRLEAM
 Site Code : 02514386
 Start Date : 10/29/2014
 Page No : 1

Groups Printed- Total Volume

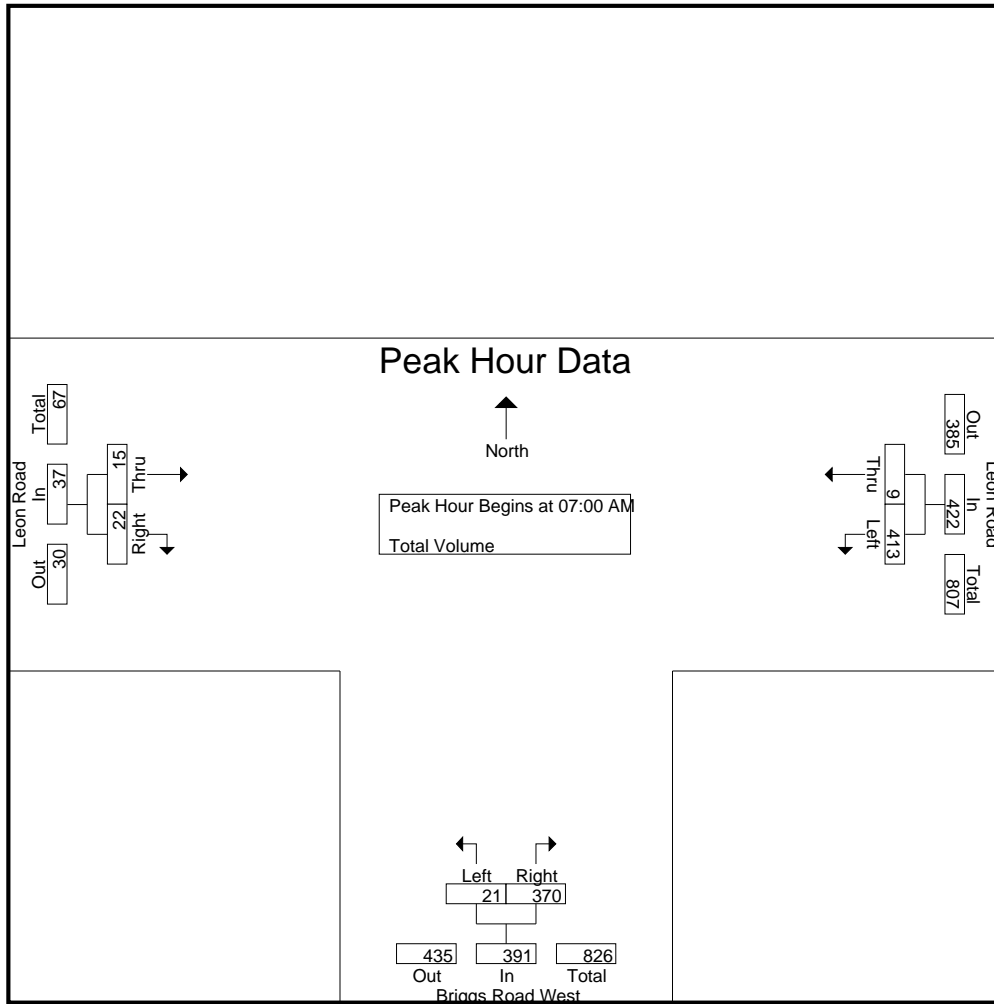
Start Time	Leon Road Westbound			Briggs Road West Northbound			Leon Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	141	0	141	4	63	67	3	8	11	219
07:15 AM	104	3	107	7	88	95	2	4	6	208
07:30 AM	90	3	93	8	122	130	4	6	10	233
07:45 AM	78	3	81	2	97	99	6	4	10	190
Total	413	9	422	21	370	391	15	22	37	850
08:00 AM	84	4	88	0	73	73	5	5	10	171
08:15 AM	84	6	90	0	67	67	5	2	7	164
08:30 AM	103	5	108	5	83	88	3	2	5	201
08:45 AM	120	7	127	2	37	39	5	7	12	178
Total	391	22	413	7	260	267	18	16	34	714
Grand Total	804	31	835	28	630	658	33	38	71	1564
Apprch %	96.3	3.7		4.3	95.7		46.5	53.5		
Total %	51.4	2	53.4	1.8	40.3	42.1	2.1	2.4	4.5	

Start Time	Leon Road Westbound			Briggs Road West Northbound			Leon Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	141	0	141	4	63	67	3	8	11	219
07:15 AM	104	3	107	7	88	95	2	4	6	208
07:30 AM	90	3	93	8	122	130	4	6	10	233
07:45 AM	78	3	81	2	97	99	6	4	10	190
Total Volume	413	9	422	21	370	391	15	22	37	850
% App. Total	97.9	2.1		5.4	94.6		40.5	59.5		
PHF	.732	.750	.748	.656	.758	.752	.625	.688	.841	.912

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:00 AM

County of Riverside
 N/S: Briggs Road West
 E/W: Leon Road
 Weather: Clear

File Name : CRVBRLEAM
 Site Code : 02514386
 Start Date : 10/29/2014
 Page No : 2

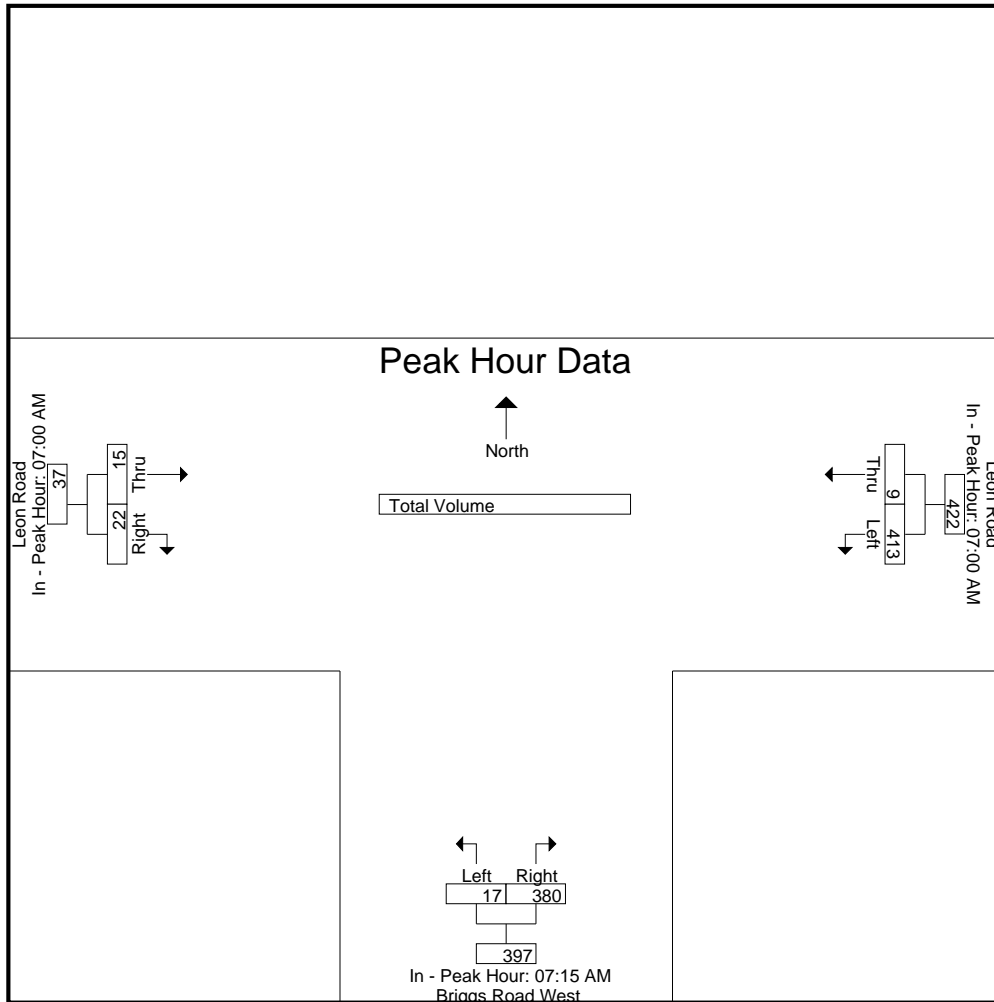


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	141	0	141	7	88	95	3	8	11
+15 mins.	104	3	107	8	122	130	2	4	6
+30 mins.	90	3	93	2	97	99	4	6	10
+45 mins.	78	3	81	0	73	73	6	4	10
Total Volume	413	9	422	17	380	397	15	22	37
% App. Total	97.9	2.1		4.3	95.7		40.5	59.5	
PHF	.732	.750	.748	.531	.779	.763	.625	.688	.841

County of Riverside
N/S: Briggs Road West
E/W: Leon Road
Weather: Clear

File Name : CRVBRLEAM
Site Code : 02514386
Start Date : 10/29/2014
Page No : 3



County of Riverside
 N/S: Briggs Road West
 E/W: Leon Road
 Weather: Clear

File Name : CRVBRLEPM
 Site Code : 02514386
 Start Date : 10/8/2014
 Page No : 1

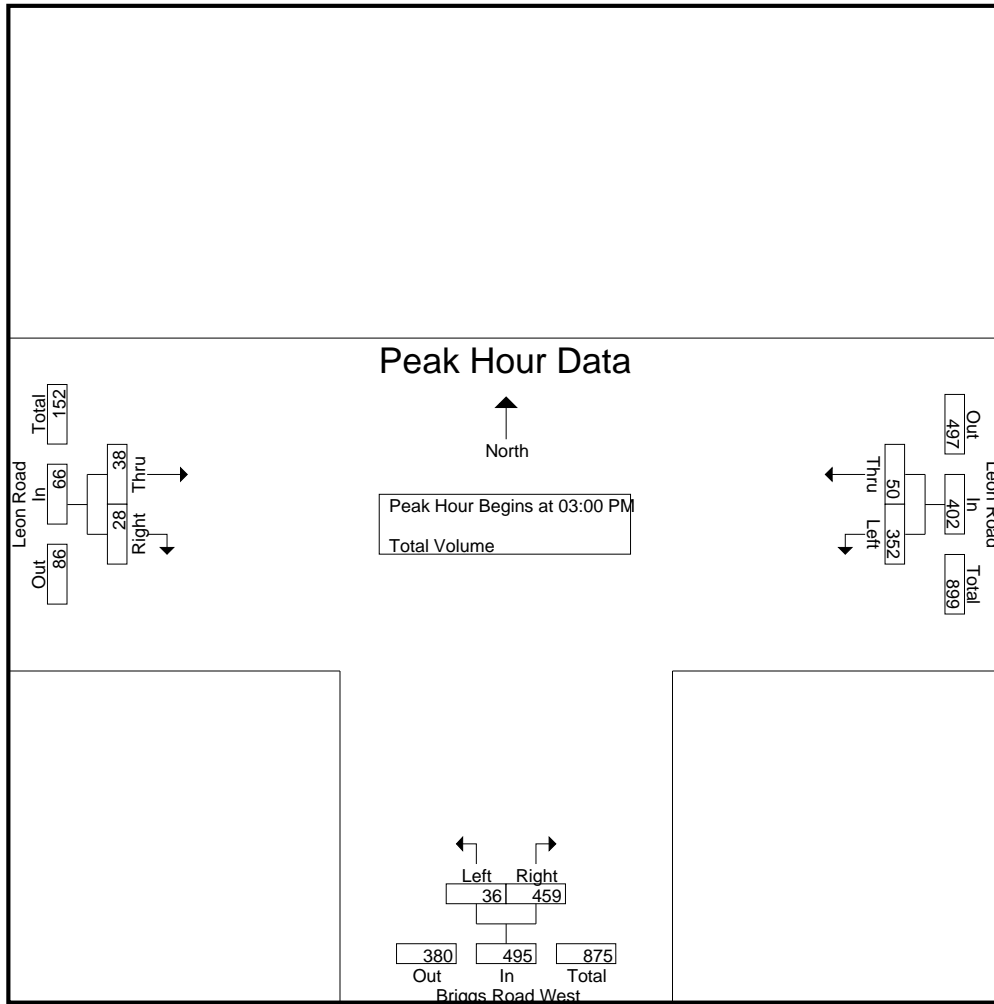
Groups Printed- Total Volume

Start Time	Leon Road Westbound			Briggs Road West Northbound			Leon Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
03:00 PM	63	27	90	10	154	164	21	6	27	281
03:15 PM	94	5	99	10	123	133	2	6	8	240
03:30 PM	122	11	133	8	94	102	10	13	23	258
03:45 PM	73	7	80	8	88	96	5	3	8	184
Total	352	50	402	36	459	495	38	28	66	963
04:00 PM	68	8	76	6	103	109	6	5	11	196
04:15 PM	53	8	61	6	103	109	5	5	10	180
04:30 PM	79	5	84	8	76	84	6	6	12	180
04:45 PM	64	9	73	7	100	107	3	1	4	184
Total	264	30	294	27	382	409	20	17	37	740
05:00 PM	62	6	68	3	117	120	4	7	11	199
05:15 PM	65	3	68	10	119	129	5	6	11	208
05:30 PM	79	13	92	3	106	109	12	16	28	229
05:45 PM	69	8	77	12	98	110	7	4	11	198
Total	275	30	305	28	440	468	28	33	61	834
Grand Total	891	110	1001	91	1281	1372	86	78	164	2537
Apprch %	89	11		6.6	93.4		52.4	47.6		
Total %	35.1	4.3	39.5	3.6	50.5	54.1	3.4	3.1	6.5	

Start Time	Leon Road Westbound			Briggs Road West Northbound			Leon Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	63	27	90	10	154	164	21	6	27	281
03:15 PM	94	5	99	10	123	133	2	6	8	240
03:30 PM	122	11	133	8	94	102	10	13	23	258
03:45 PM	73	7	80	8	88	96	5	3	8	184
Total Volume	352	50	402	36	459	495	38	28	66	963
% App. Total	87.6	12.4		7.3	92.7		57.6	42.4		
PHF	.721	.463	.756	.900	.745	.755	.452	.538	.611	.857

County of Riverside
 N/S: Briggs Road West
 E/W: Leon Road
 Weather: Clear

File Name : CRVBRLEPM
 Site Code : 02514386
 Start Date : 10/8/2014
 Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	63	27	90	10	154	164	21	6	27
+15 mins.	94	5	99	10	123	133	2	6	8
+30 mins.	122	11	133	8	94	102	10	13	23
+45 mins.	73	7	80	8	88	96	5	3	8
Total Volume	352	50	402	36	459	495	38	28	66
% App. Total	87.6	12.4		7.3	92.7		57.6	42.4	
PHF	.721	.463	.756	.900	.745	.755	.452	.538	.611

Counts Unlimited, Inc

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

County of Riverside
 Clinton Keith Road
 200' E/ Whitewood Road
 48 Hour Directional Classification Count

CRV005
 Site Code: 025-14386B

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/09/14	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
07:00	1	47	20	0	5	0	0	0	0	0	1	0	0	74
08:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
09:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
10:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
12 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
14:00	3	30	12	0	0	0	0	0	0	0	0	0	0	45
15:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
16:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
17:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10
18:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
19:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
20:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	4	129	47	0	10	0	0	0	0	0	1	0	0	191
Percent	2.1%	67.5%	24.6%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00		07:00						07:00			07:00
Vol.	1	47	20		5						1			74
PM Peak	14:00	14:00	14:00		15:00									14:00
Vol.	3	30	12		1									45
Grand Total	8	236	93	1	19	0	0	0	0	0	1	0	0	358
Percent	2.2%	65.9%	26.0%	0.3%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	

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County of Riverside
 Clinton Keith Road
 200' E/ Whitewood Road
 48 Hour Directional Classification Count

CRV005
 Site Code: 025-14386B

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/09/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
07:00	3	38	20	0	5	0	0	0	0	0	1	0	0	67
08:00	0	4	0	0	1	0	0	0	0	0	0	0	0	5
09:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
11:00	0	4	3	0	1	0	0	0	0	0	0	0	0	8
12 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
13:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
14:00	1	33	15	0	2	0	0	0	0	0	0	0	0	51
15:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
16:00	0	4	2	0	1	0	0	0	0	0	0	0	0	7
17:00	0	3	4	0	0	0	0	0	0	0	0	0	0	7
18:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
20:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
21:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	115	51	0	11	0	0	0	0	0	1	0	0	183
Percent	2.7%	62.8%	27.9%	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00		07:00						07:00			07:00
Vol.	3	38	20		5						1			67
PM Peak	14:00	14:00	14:00		14:00									14:00
Vol.	1	33	15		2									51
Grand Total	8	204	92	0	18	0	0	0	0	0	1	0	0	323
Percent	2.5%	63.2%	28.5%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	

Counts Unlimited, Inc

County of Riverside
 Leon Road
 500' W/ Max Gillis Boulevard
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV007
 Site Code: 025-14386B

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	0	16	2	0	0	0	0	0	0	0	0	0	0	18
01:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
02:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
03:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
04:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
05:00	0	33	8	0	1	0	0	0	0	0	0	0	0	42
06:00	1	59	10	0	4	0	0	2	0	0	0	0	0	76
07:00	1	324	54	1	11	0	0	1	0	0	0	0	0	392
08:00	0	232	57	0	11	0	0	1	0	0	0	0	0	301
09:00	1	111	28	0	7	0	0	0	0	0	0	0	0	147
10:00	0	97	31	0	3	1	0	1	0	0	0	0	0	133
11:00	0	110	30	0	3	0	0	1	1	0	0	0	0	145
12 PM	2	179	40	0	9	0	0	0	0	0	0	0	0	230
13:00	3	161	44	0	5	0	0	0	0	0	0	0	0	213
14:00	0	242	67	3	5	0	0	1	0	0	0	0	0	318
15:00	1	417	94	1	11	0	0	1	0	0	0	0	0	525
16:00	2	293	88	0	24	0	0	3	0	0	0	0	0	410
17:00	4	373	79	0	13	0	0	2	0	0	0	0	0	471
18:00	2	307	61	0	10	0	0	0	0	0	0	0	0	380
19:00	0	199	63	0	6	0	0	0	0	0	0	0	0	268
20:00	1	164	41	0	7	0	0	0	0	0	0	0	0	213
21:00	0	104	18	0	1	0	0	0	0	0	0	0	0	123
22:00	0	44	7	0	2	0	0	0	0	0	0	0	0	53
23:00	0	25	4	0	0	0	0	0	0	0	0	0	0	29
Total	18	3526	831	5	133	1	0	13	1	0	0	0	0	4528
Percent	0.4%	77.9%	18.4%	0.1%	2.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	08:00	07:00	07:00	10:00		06:00	11:00					07:00
Vol.	1	324	57	1	11	1		2	1					392
PM Peak	17:00	15:00	15:00	14:00	16:00			16:00						15:00
Vol.	4	417	94	3	24			3						525

Counts Unlimited, Inc

County of Riverside
 Leon Road
 500' W/ Max Gillis Boulevard
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV007
 Site Code: 025-14386B

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	0	15	0	0	0	0	0	0	0	0	0	0	0	15
01:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
02:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
03:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	36	9	0	2	0	0	0	0	0	0	0	0	47
05:00	1	72	18	0	2	0	0	0	0	0	0	0	0	93
06:00	3	207	45	2	4	0	0	1	0	0	0	0	0	262
07:00	0	383	56	1	13	0	0	0	0	0	0	0	0	453
08:00	1	328	57	3	16	0	0	0	0	0	0	0	0	405
09:00	1	146	39	1	3	0	0	1	0	0	0	0	0	191
10:00	2	130	26	0	8	0	0	0	0	0	0	0	0	166
11:00	1	123	33	0	7	0	0	0	0	0	0	0	0	164
12 PM	0	121	33	0	2	0	0	1	0	0	0	0	0	157
13:00	0	124	28	0	4	0	0	1	0	0	0	0	0	157
14:00	1	208	63	0	4	0	0	0	0	0	0	0	0	276
15:00	2	301	67	0	13	0	0	3	0	1	0	0	0	387
16:00	0	238	49	0	12	0	0	2	1	0	0	0	0	302
17:00	4	236	54	0	6	0	0	0	0	0	0	0	0	300
18:00	1	199	48	0	4	0	0	2	0	0	0	0	0	254
19:00	1	131	23	0	3	0	0	0	0	0	0	0	0	158
20:00	0	69	8	0	3	0	0	0	0	0	0	0	0	80
21:00	0	50	11	0	3	0	0	0	0	0	0	0	0	64
22:00	0	20	2	0	1	0	0	0	0	0	0	0	0	23
23:00	0	13	2	0	1	0	0	0	0	0	0	0	0	16
Total	18	3166	674	7	111	0	0	11	1	1	0	0	0	3989
Percent	0.5%	79.4%	16.9%	0.2%	2.8%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	08:00	08:00	08:00			06:00						07:00
Vol.	3	383	57	3	16			1						453
PM Peak	17:00	15:00	15:00		15:00			15:00	16:00	15:00				15:00
Vol.	4	301	67		13			3	1	1				387

Counts Unlimited, Inc

County of Riverside
 Max Gillis Boulevard
 900' W/ State Route 79
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV011
 Site Code: 025-14386B

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	0	29	4	0	0	0	0	0	0	0	0	0	0	33
01:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15
02:00	0	16	3	0	0	0	0	0	0	0	0	0	0	19
03:00	0	27	3	0	2	0	0	0	0	0	0	0	0	32
04:00	1	57	18	0	1	0	0	0	0	0	0	0	0	77
05:00	4	165	28	0	3	0	0	0	0	0	0	0	0	200
06:00	4	232	34	2	15	0	0	2	1	0	0	0	0	290
07:00	2	460	68	2	18	0	0	3	0	0	0	0	0	553
08:00	2	629	82	1	9	4	0	6	2	1	0	1	0	737
09:00	0	339	85	1	11	8	0	6	0	0	0	0	0	450
10:00	1	203	94	1	14	2	0	1	1	1	0	0	0	318
11:00	0	219	87	1	11	2	0	3	0	0	0	0	0	323
12 PM	3	256	90	3	29	5	0	0	0	0	0	0	0	386
13:00	6	234	84	3	18	3	0	2	1	0	0	0	0	351
14:00	1	317	104	2	21	1	0	4	1	0	0	0	0	451
15:00	2	491	169	6	31	1	0	10	0	0	0	0	0	710
16:00	2	387	121	0	34	0	0	4	0	1	0	0	0	549
17:00	5	482	117	0	28	0	0	5	0	1	0	0	0	638
18:00	6	416	96	0	19	1	0	4	0	0	0	0	0	542
19:00	1	294	71	0	13	0	0	3	0	0	0	0	0	382
20:00	5	232	74	0	11	0	0	1	0	0	0	0	0	323
21:00	1	163	29	0	11	1	0	2	0	0	0	0	0	207
22:00	2	82	15	0	4	0	0	0	0	0	0	0	0	103
23:00	0	49	10	0	2	0	0	1	0	0	0	0	0	62
Total	48	5794	1486	22	305	28	0	57	6	4	0	1	0	7751
Percent	0.6%	74.8%	19.2%	0.3%	3.9%	0.4%	0.0%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	
AM Peak	05:00	08:00	10:00	06:00	07:00	09:00		08:00	08:00	08:00		08:00		08:00
Vol.	4	629	94	2	18	8		6	2	1		1		737
PM Peak	13:00	15:00	15:00	15:00	16:00	12:00		15:00	13:00	16:00				15:00
Vol.	6	491	169	6	34	5		10	1	1				710

Counts Unlimited, Inc

County of Riverside
 Max Gillis Boulevard
 900' W/ State Route 79
 48 Hour Directional Classification Count

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CRV011
 Site Code: 025-14386B

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	1	33	6	1	0	0	0	0	0	0	0	0	0	41
01:00	0	19	3	0	1	0	0	0	0	0	0	0	0	23
02:00	0	7	3	1	1	0	0	0	0	0	0	0	0	12
03:00	0	19	2	1	3	0	0	0	1	0	0	0	0	26
04:00	0	44	9	1	2	0	0	0	0	0	0	0	0	56
05:00	1	81	28	1	6	0	0	0	1	0	0	0	0	118
06:00	3	239	56	3	7	3	0	2	0	0	0	0	0	313
07:00	1	399	93	2	16	4	0	1	0	0	0	0	0	516
08:00	3	443	112	2	17	8	0	0	0	0	0	0	0	585
09:00	1	259	68	1	16	5	0	1	2	0	0	0	0	353
10:00	1	231	70	0	10	2	1	1	0	0	0	0	0	316
11:00	0	233	89	1	9	10	0	2	1	0	0	0	0	345
12 PM	2	216	61	3	10	5	0	1	0	0	0	0	0	298
13:00	0	248	88	4	21	4	0	3	0	0	0	0	0	368
14:00	4	337	135	1	14	6	0	1	1	0	0	0	0	499
15:00	5	430	130	2	21	0	0	1	0	0	0	0	0	589
16:00	2	434	127	0	18	0	0	2	2	0	0	0	0	585
17:00	9	434	136	0	17	0	0	2	0	0	0	0	0	598
18:00	4	424	117	0	10	0	0	2	0	0	0	0	0	557
19:00	1	311	80	0	7	0	0	1	0	0	0	0	0	400
20:00	1	210	33	0	6	0	0	0	0	0	0	0	0	250
21:00	0	158	29	0	6	0	0	0	0	0	0	0	0	193
22:00	2	68	13	0	5	0	0	0	0	0	0	0	0	88
23:00	1	49	7	0	1	0	0	0	0	0	0	0	0	58
Total	42	5326	1495	24	224	47	1	20	8	0	0	0	0	7187
Percent	0.6%	74.1%	20.8%	0.3%	3.1%	0.7%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	08:00	08:00	06:00	08:00	11:00	10:00	06:00	09:00					08:00
Vol.	3	443	112	3	17	10	1	2	2					585
PM Peak	17:00	16:00	17:00	13:00	13:00	14:00		13:00	16:00					17:00
Vol.	9	434	136	4	21	6		3	2					598

Counts Unlimited, Inc

County of Riverside
 Los Alamos Road
 700' W/ Menifee Road
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV003CL
 Site Code: 025-14386A

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	0	18	4	0	0	0	0	0	0	0	0	0	0	22
01:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
02:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
05:00	0	23	7	0	1	0	0	0	0	0	0	0	0	31
06:00	0	49	13	0	2	0	0	1	0	0	0	0	0	65
07:00	1	309	79	1	12	0	0	1	0	0	0	0	0	403
08:00	0	195	63	0	13	0	0	1	0	0	0	0	0	272
09:00	0	102	40	0	3	0	0	0	0	0	0	0	0	145
10:00	0	79	30	0	3	0	0	2	0	0	0	0	0	114
11:00	0	98	33	0	7	0	0	0	1	0	0	0	0	139
12 PM	2	164	44	0	9	0	0	1	0	0	0	0	0	220
13:00	3	142	54	0	8	0	0	0	0	0	0	0	0	207
14:00	0	274	85	3	11	0	0	1	0	0	0	0	0	374
15:00	3	362	113	0	23	0	0	1	1	0	0	0	0	503
16:00	1	269	110	0	27	0	0	3	0	0	0	0	0	410
17:00	4	349	95	0	18	0	0	3	0	0	0	0	0	469
18:00	4	289	68	0	12	0	0	0	0	0	0	0	0	373
19:00	0	192	58	0	10	0	0	1	0	0	0	0	0	261
20:00	1	160	51	0	12	0	0	0	0	0	0	0	0	224
21:00	0	107	25	0	3	0	0	0	0	0	0	0	0	135
22:00	0	42	10	0	2	0	0	0	0	0	0	0	0	54
23:00	0	22	5	0	0	0	0	0	0	0	0	0	0	27
Total	19	3269	992	4	176	0	0	15	2	0	0	0	0	4477
Percent	0.4%	73.0%	22.2%	0.1%	3.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	08:00			10:00	11:00					07:00
Vol.	1	309	79	1	13			2	1					403
PM Peak	17:00	15:00	15:00	14:00	16:00			16:00	15:00					15:00
Vol.	4	362	113	3	27			3	1					503

Counts Unlimited, Inc

County of Riverside
 Los Alamos Road
 700' W/ Menifee Road
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV003CL
 Site Code: 025-14386A

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/09/14	0	13	1	0	0	0	0	0	0	0	0	0	0	14
01:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
02:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
03:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	35	3	0	1	0	0	0	0	0	0	0	0	39
05:00	0	78	24	0	8	0	0	0	0	0	0	0	0	110
06:00	2	201	36	0	7	0	0	1	0	0	0	0	0	247
07:00	0	404	82	3	12	0	0	1	0	0	0	0	0	502
08:00	2	317	67	0	15	1	0	1	0	0	0	0	0	403
09:00	1	190	41	4	11	0	0	0	0	0	0	0	0	247
10:00	1	107	26	1	5	0	0	0	0	0	0	0	0	140
11:00	0	111	35	0	4	0	0	2	0	0	0	0	0	152
12 PM	0	141	34	0	8	0	0	1	0	0	0	0	0	184
13:00	0	101	18	0	5	0	0	0	1	0	0	0	0	125
14:00	2	222	38	0	7	0	0	0	1	0	0	0	0	270
15:00	0	335	68	0	15	1	0	0	0	0	0	0	0	419
16:00	2	268	48	0	15	0	0	0	0	0	0	0	0	333
17:00	1	241	60	0	10	0	0	0	0	0	0	0	0	312
18:00	1	178	45	0	5	0	0	0	0	0	0	0	0	229
19:00	1	115	19	0	2	0	0	0	0	0	0	0	0	137
20:00	0	64	14	0	2	0	0	1	0	0	0	0	0	81
21:00	0	59	12	0	0	0	0	0	0	0	0	0	0	71
22:00	0	23	7	0	3	0	0	0	0	0	0	0	0	33
23:00	0	18	4	0	1	0	0	0	0	0	0	0	0	23
Total	13	3242	684	8	136	2	0	7	2	0	0	0	0	4094
Percent	0.3%	79.2%	16.7%	0.2%	3.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	07:00	09:00	08:00	08:00		11:00						07:00
Vol.	2	404	82	4	15	1		2						502
PM Peak	14:00	15:00	15:00		15:00	15:00		12:00	13:00					15:00
Vol.	2	335	68		15	1		1	1					419
Grand Total	24	6487	1327	15	268	2	0	15	4	0	0	0	0	8142
Percent	0.3%	79.7%	16.3%	0.2%	3.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc

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County of Riverside
 Los Alamos Road
 1200' W/ Liberty Lane
 48 Hour Directional Speed Survey

CRV002SP
 Site Code: 025-14386A

Westbound

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
10/09/14	0	0	0	0	3	5	1	1	2	0	0	0	0	0	12
01:00	0	0	0	0	1	2	2	0	1	1	0	0	0	0	7
02:00	0	0	0	0	0	2	2	2	0	0	0	0	0	0	6
03:00	0	0	0	0	0	3	5	1	0	0	0	0	0	0	9
04:00	0	0	0	0	4	13	13	9	2	0	0	0	0	0	41
05:00	0	0	0	1	4	34	50	15	3	2	0	0	0	0	109
06:00	0	0	2	26	40	131	80	8	1	0	0	0	0	0	288
07:00	0	0	0	7	56	227	158	27	3	0	0	0	0	0	478
08:00	0	0	6	7	47	215	118	11	1	0	0	0	0	0	405
09:00	0	0	0	0	22	83	84	18	3	0	0	0	0	0	210
10:00	2	0	0	0	14	75	34	11	1	0	0	0	0	0	137
11:00	0	0	0	1	18	61	55	13	1	0	0	0	0	0	149
12 PM	0	0	0	0	13	81	75	10	0	0	0	0	0	0	179
13:00	2	0	0	0	9	64	44	6	1	0	0	0	0	0	126
14:00	1	0	0	10	32	138	83	8	2	0	0	0	0	0	274
15:00	0	0	0	6	43	236	114	9	2	0	0	0	0	0	410
16:00	0	0	3	5	26	135	139	21	1	0	0	0	0	0	330
17:00	1	0	0	0	29	134	125	15	1	0	0	0	0	0	305
18:00	0	0	0	3	24	122	62	8	0	0	0	0	0	0	219
19:00	0	0	0	2	36	65	22	5	0	0	0	0	0	0	130
20:00	0	0	0	1	20	32	21	0	2	0	0	0	0	0	76
21:00	0	0	0	1	13	30	19	3	0	1	0	0	0	0	67
22:00	0	0	0	4	5	12	9	4	0	0	0	0	0	0	34
23:00	0	1	0	1	2	6	5	4	0	0	0	0	0	0	19
Total	6	1	11	75	461	1906	1320	209	27	4	0	0	0	0	4020
Grand Total	12	5	14	155	921	3733	2700	411	44	6	1	0	0	0	8002

15th Percentile : 35 MPH
 50th Percentile : 38 MPH
 85th Percentile : 43 MPH
 95th Percentile : 45 MPH

Statistics
 Mean Speed(Average) : 39 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 6433
 Percent in Pace : 80.4%
 Number of Vehicles > 55 MPH : 7
 Percent of Vehicles > 55 MPH : 0.1%

Counts Unlimited, Inc

County of Riverside
 Los Alamos Road
 1300' W/ Briggs Road
 48 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV001CL
 Site Code: 025-14386A

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/08/14	0	17	3	0	0	0	0	0	0	0	0	0	0	20
01:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
02:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
05:00	0	24	8	0	1	0	0	0	0	0	0	0	0	33
06:00	0	44	11	0	3	0	0	1	0	0	0	0	0	59
07:00	1	329	59	1	12	0	0	1	0	0	0	0	0	403
08:00	0	214	47	0	11	0	0	2	0	0	0	0	0	274
09:00	1	111	28	0	6	0	0	0	0	0	0	0	0	146
10:00	0	86	25	0	4	0	0	2	0	0	0	0	0	117
11:00	0	102	23	0	4	0	0	0	1	0	0	0	0	130
12 PM	2	171	32	0	9	0	0	0	0	0	0	0	0	214
13:00	3	152	44	0	4	0	0	0	0	0	0	0	0	203
14:00	0	275	63	3	6	0	0	1	0	0	0	0	0	348
15:00	2	394	86	0	12	0	0	1	0	0	0	0	0	495
16:00	2	298	85	0	22	0	0	3	0	0	0	0	0	410
17:00	4	376	74	0	14	0	0	2	0	0	0	0	0	470
18:00	4	295	57	0	9	0	0	0	0	0	0	0	0	365
19:00	0	195	54	0	5	0	0	1	0	0	0	0	0	255
20:00	1	173	41	0	8	0	0	0	0	0	0	0	0	223
21:00	0	104	21	0	1	0	0	0	0	0	0	0	0	126
22:00	0	44	9	0	2	0	0	0	0	0	0	0	0	55
23:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
Total	20	3450	778	4	133	0	0	14	1	0	0	0	0	4400
Percent	0.5%	78.4%	17.7%	0.1%	3.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	07:00			08:00	11:00					07:00
Vol.	1	329	59	1	12			2	1					403
PM Peak	17:00	15:00	15:00	14:00	16:00			16:00						15:00
Vol.	4	394	86	3	22			3						495

Counts Unlimited, Inc

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 Los Alamos Road
 1300' W/ Briggs Road
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CRV001CL
 Site Code: 025-14386A

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/09/14	0	10	2	0	0	0	0	0	0	0	0	0	0	12
01:00	1	4	1	0	0	0	0	0	0	0	0	0	0	6
02:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
03:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
04:00	0	33	5	0	2	0	0	0	0	0	0	0	0	40
05:00	0	68	24	0	14	0	0	0	0	0	0	0	0	106
06:00	2	190	81	1	20	0	0	1	0	0	0	0	0	295
07:00	0	303	145	2	22	1	0	1	0	0	0	0	0	474
08:00	2	251	117	3	33	0	0	1	0	0	0	0	0	407
09:00	1	125	58	1	21	0	0	0	0	0	0	0	0	206
10:00	1	81	40	1	8	0	0	0	0	0	0	0	0	131
11:00	0	95	38	0	13	0	0	2	0	0	0	0	0	148
12 PM	0	120	44	0	13	0	0	0	0	0	0	0	0	177
13:00	2	82	31	0	10	0	0	0	1	0	0	0	0	126
14:00	2	183	79	0	15	0	0	1	1	0	0	0	0	281
15:00	2	270	103	0	32	1	0	0	0	0	0	0	0	408
16:00	1	208	97	0	29	0	0	0	0	0	0	0	0	335
17:00	1	186	91	0	22	0	0	0	1	0	0	0	0	301
18:00	1	155	50	0	15	0	0	0	0	0	0	0	0	221
19:00	1	83	32	0	7	0	0	0	0	0	0	0	0	123
20:00	0	52	13	0	10	0	0	1	0	0	0	0	0	76
21:00	0	47	15	0	4	0	0	0	0	0	0	0	0	66
22:00	0	26	2	0	5	0	0	0	0	0	0	0	0	33
23:00	0	11	7	0	1	0	0	0	0	0	0	0	0	19
Total	17	2597	1075	8	297	2	0	7	3	0	0	0	0	4006
Percent	0.4%	64.8%	26.8%	0.2%	7.4%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	07:00	08:00	08:00	07:00		11:00						07:00
Vol.	2	303	145	3	33	1		2						474
PM Peak	13:00	15:00	15:00		15:00	15:00		14:00	13:00					15:00
Vol.	2	270	103		32	1		1	1					408
Grand Total	32	5136	2217	15	553	2	0	15	4	0	0	0	0	7974
Percent	0.4%	64.4%	27.8%	0.2%	6.9%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	

APPENDIX B

VOLUME DEVELOPMENT WORKSHEETS

Clinton Keith Road Extension Traffic Analysis
Table B-1 - Year 2013 Growth Rate from Without Project Link Volumes

			Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Total % Change	Per Year % Change
1 Whitewood Road/Clinton Keith Road						
AM Peak Hour						
Northbound	Left	Approach	356	2,230	0.8404	1.5856%
	Through Right	Departure	544	2,883		
Southbound	Left	Approach	262	1,924	0.8638	1.6299%
	Through Right	Departure	155	2,300		
Eastbound	Left	Approach	1,244	3,336	0.6271	1.1832%
	Through Right	Departure	1,070	2,120		
Westbound	Left	Approach	886	1,706	0.4807	0.9069%
	Through Right	Departure	980	1,893		
PM Peak Hour						
Northbound	Left	Approach	691	3,718	0.8141	1.5361%
	Through Right	Departure	805	3,426		
Southbound	Left	Approach	540	4,407	0.8775	1.6556%
	Through Right	Departure	438	3,090		
Eastbound	Left	Approach	1,859	3,403	0.4537	0.8561%
	Through Right	Departure	1,908	5,466		
Westbound	Left	Approach	1,490	2,728	0.4538	0.8562%
	Through Right	Departure	1,429	2,273		

Clinton Keith Road Extension Traffic Analysis
Table B-1 - Year 2013 Growth Rate from Without Project Link Volumes

			Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Total % Change	Per Year % Change
2	Menifee Road/Clinton Keith Road					
AM Peak Hour						
Northbound	Left	Approach	906	2,018	0.5510	1.0397%
	Through	Departure	1,002	2,146		
	Right					
Southbound	Left	Approach	21	252	0.9167	1.7296%
	Through	Departure	20	311		
	Right					
Eastbound	Left	Approach	980	1,893	0.4823	0.9100%
	Through	Departure	886	1,706		
	Right					
Westbound	Left	Approach	0	0	-	-
	Through	Departure	0	0	-	-
	Right					
PM Peak Hour						
Northbound	Left	Approach	1,536	3,217	0.5225	0.9859%
	Through	Departure	1,542	2,867		
	Right					
Southbound	Left	Approach	113	594	0.8098	1.5279%
	Through	Departure	46	489		
	Right					
Eastbound	Left	Approach	1,429	2,273	0.3713	0.7006%
	Through	Departure	1,490	2,728		
	Right					
Westbound	Left	Approach	0	0	-	-
	Through	Departure	0	0	-	-
	Right					

Clinton Keith Road Extension Traffic Analysis
Table B-1 - Year 2013 Growth Rate from Without Project Link Volumes

			Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Total % Change	Per Year % Change
8	Max Gillis Boulevard/Leon Road					
AM Peak Hour						
Northbound	Left	Approach	1,327	4,408	0.6990	1.3188%
	Through Right	Departure	1,661	5,842		
Southbound	Left	Approach	763	4,690	0.8373	1.5798%
	Through Right	Departure	705	2,951		
Eastbound	Left	Approach	911	1,071	0.1494	0.2819%
	Through Right	Departure	716	2,131		
Westbound	Left	Approach	273	2,237	0.8780	1.6565%
	Through Right	Departure	192	1,483		
PM Peak Hour						
Northbound	Left	Approach	2,192	8,245	0.7341	1.3852%
	Through Right	Departure	2,703	7,036		
Southbound	Left	Approach	1,463	4,779	0.6939	1.3092%
	Through Right	Departure	936	6,194		
Eastbound	Left	Approach	1,163	3,068	0.6209	1.1716%
	Through Right	Departure	1,453	2,023		
Westbound	Left	Approach	548	2,688	0.7961	1.5021%
	Through Right	Departure	273	3,527		

Clinton Keith Road Extension Traffic Analysis
Table B-1 - Year 2013 Growth Rate from Without Project Link Volumes

			Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Total % Change	Per Year % Change
9	SR-79 /Max Gillis Boulevard					
AM Peak Hour						
Northbound	Left	Approach	1,760	8,119	0.7832	1.4778%
	Through	Departure	3,188	10,034		
	Right					
Southbound	Left	Approach	2,394	7,467	0.6794	1.2819%
	Through	Departure	1,835	6,976		
	Right					
Eastbound	Left	Approach	1,695	6,029	0.7189	1.3563%
	Through	Departure	1,340	4,517		
	Right					
Westbound	Left	Approach	1,625	4,197	0.6128	1.1563%
	Through	Departure	1,112	4,284		
	Right					
PM Peak Hour						
Northbound	Left	Approach	4,269	14,739	0.7104	1.3403%
	Through	Departure	4,501	13,517		
	Right					
Southbound	Left	Approach	3,896	12,285	0.6829	1.2884%
	Through	Departure	3,473	11,346		
	Right					
Eastbound	Left	Approach	2,748	7,455	0.6314	1.1913%
	Through	Departure	2,240	8,531		
	Right					
Westbound	Left	Approach	1,669	5,380	0.6898	1.3015%
	Through	Departure	2,368	6,465		
	Right					

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
1 Whitewood Road/Clinton Keith Road						
NBL	158	1.586%	161	251	1.536%	255
NBT	70	1.586%	71	103	1.536%	105
NBR	13	1.586%	13	11	1.536%	11
SBL	1	1.630%	1	5	1.656%	5
SBT	135	1.630%	137	108	1.656%	110
SBR	120	1.630%	122	67	1.656%	68
EBL	120	1.183%	121	142	0.856%	143
EBT	6	1.183%	6	4	0.856%	4
EBR	332	1.183%	336	421	0.856%	425
WBL	37	0.907%	37	8	0.856%	8
WBT	10	0.907%	10	1	0.856%	1
WBR	0	0.907%	0	2	0.856%	2
North Leg						
Approach	256	0	260	180	0	183
Departure	190	0	193	247	0	250
Total	446	0	453	427	0	433
South Leg						
Approach	241	0	245	365	0	371
Departure	504	0	510	537	0	542
Total	745	0	755	902	0	913
East Leg						
Approach	47	0	47	11	0	11
Departure	20	0	20	20	0	20
Total	67	0	68	31	0	31
West Leg						
Approach	458	0	463	567	0	572
Departure	288	0	293	319	0	324
Total	746	0	756	886	0	896
Total Approaches						
Approach	1,002	0	1,016	1,123	0	1,137
Departure	1,002	0	1,016	1,123	0	1,137
Total	2,004	0	2,032	2,246	0	2,273

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
2 Menifee Road/Clinton Keith Road						
NBL	11	1.040%	11	3	0.986%	3
NBT	5	1.040%	5	5	0.986%	5
NBR	5	1.040%	5	5	0.986%	5
SBL	5	1.730%	5	5	1.528%	5
SBT	5	1.730%	5	5	1.528%	5
SBR	11	1.730%	11	3	1.528%	3
EBL	5	0.910%	5	5	0.701%	5
EBT	2	0.910%	2	2	0.701%	2
EBR	5	0.910%	5	5	0.701%	5
WBL	5	0.910%	5	5	0.701%	5
WBT	11	0.910%	11	3	0.701%	3
WBR	5	0.910%	5	5	0.701%	5
North Leg						
Approach	21	0	21	13	0	13
Departure	15	0	15	15	0	15
Total	36	0	37	28	0	28
South Leg						
Approach	21	0	21	13	0	13
Departure	15	0	15	15	0	15
Total	36	0	36	28	0	28
East Leg						
Approach	21	0	21	13	0	13
Departure	12	0	12	12	0	12
Total	33	0	33	25	0	25
West Leg						
Approach	12	0	12	12	0	12
Departure	33	0	33	9	0	9
Total	45	0	46	21	0	21
Total Approaches						
Approach	75	0	76	51	0	52
Departure	75	0	76	51	0	52
Total	150	0	152	102	0	103

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
3 Trois Valley Street/Clinton Keith Road						
NBL			0			0
NBT			0			0
NBR			0			0
SBL	36	0.282%	36	24	1.172%	24
SBT			0			0
SBR			0			0
EBL			0			0
EBT			0			0
EBR			0			0
WBL			0			0
WBT			0			0
WBR	12	0.282%	12	41	1.172%	41
North Leg						
Approach	36	0	36	24	0	24
Departure	12	0	12	41	0	41
Total	48	0	48	65	0	66
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	12	0	12	41	0	41
Departure	36	0	36	24	0	24
Total	48	0	48	65	0	66
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	48	0	48	65	0	66
Departure	48	0	48	65	0	66
Total	96	0	96	130	0	132

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
4 Clinton Keith Road/Leon Road						
NBL			0			0
NBT			0			0
NBR			0			0
SBL	31	0.282%	31	74	1.172%	75
SBT			0			0
SBR			0			0
EBL			0			0
EBT			0			0
EBR			0			0
WBL			0			0
WBT			0			0
WBR	38	0.282%	38	57	1.172%	58
North Leg						
Approach	31	0	31	74	0	75
Departure	38	0	38	57	0	58
Total	69	0	69	131	0	133
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	38	0	38	57	0	58
Departure	31	0	31	74	0	75
Total	69	0	69	131	0	133
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	69	0	69	131	0	133
Departure	69	0	69	131	0	133
Total	138	0	138	262	0	265

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
8 Max Gillis Boulevard/Leon Road						
NBL	167	1.319%	169	17	1.385%	17
NBT	52	1.319%	53	98	1.385%	99
NBR	95	1.319%	96	215	1.385%	218
SBL	194	1.580%	197	243	1.309%	246
SBT	46	1.580%	47	30	1.309%	30
SBR	147	1.580%	149	8	1.309%	8
EBL	124	0.282%	124	3	1.172%	3
EBT	359	0.282%	360	77	1.172%	78
EBR	131	0.282%	131	28	1.172%	28
WBL	209	1.657%	212	158	1.502%	160
WBT	360	1.657%	366	123	1.502%	125
WBR	149	1.657%	151	253	1.502%	257
North Leg						
Approach	387	0	393	281	0	285
Departure	325	0	329	354	0	359
Total	712	0	722	635	0	644
South Leg						
Approach	314	0	318	330	0	335
Departure	386	0	391	216	0	219
Total	700	0	709	546	0	554
East Leg						
Approach	718	0	730	534	0	542
Departure	648	0	653	535	0	542
Total	1,366	0	1,383	1,069	0	1,084
West Leg						
Approach	614	0	616	108	0	109
Departure	674	0	684	148	0	150
Total	1,288	0	1,300	256	0	259
Total Approaches						
Approach	2,033	0	2,057	1,253	0	1,271
Departure	2,033	0	2,057	1,253	0	1,271
Total	4,066	0	4,114	2,506	0	2,541

Table B-2 - Existing (2013) Adjusted Peak Hour Traffic Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume	2,013 Volume	Annual Growth Rate	2,014 Adj. Volume
9 SR-79 /Max Gillis Boulevard						
NBL	316	1.478%	321	389	1.340%	394
NBT	539	1.478%	547	1,287	1.340%	1304
NBR	64	1.478%	65	256	1.340%	259
SBL	19	1.282%	19	19	1.288%	19
SBT	938	1.282%	950	624	1.288%	632
SBR	50	1.282%	51	28	1.288%	28
EBL	48	1.356%	49	55	1.191%	56
EBT	100	1.356%	101	132	1.191%	134
EBR	499	1.356%	506	341	1.191%	345
WBL	208	1.156%	210	165	1.301%	167
WBT	213	1.156%	215	103	1.301%	104
WBR	25	1.156%	25	14	1.301%	14
North Leg						
Approach	1,007	0	1,020	671	0	680
Departure	612	0	621	1,356	0	1,374
Total	1,619	0	1,641	2,027	0	2,054
South Leg						
Approach	919	0	933	1,932	0	1,958
Departure	1,645	0	1,666	1,130	0	1,144
Total	2,564	0	2,599	3,062	0	3,102
East Leg						
Approach	446	0	451	282	0	286
Departure	183	0	186	407	0	412
Total	629	0	637	689	0	698
West Leg						
Approach	647	0	656	528	0	534
Departure	579	0	587	520	0	527
Total	1,226	0	1,243	1,048	0	1,061
Total Approaches						
Approach	3,019	0	3,059	3,413	0	3,458
Departure	3,019	0	3,059	3,413	0	3,458
Total	6,038	0	6,119	6,826	0	6,915

Table B-3 - Existing (2014) Peak Hour Traffic Volume Summary

	AM Peak Hour									PM Peak Hour								
	Total Vehicles	Truck (%)			Passenger Vehicles	Truck PCE			Total PCE Volume	Total Vehicles	Truck (%)			Passenger Vehicles	Truck PCE			Total PCE Volume
		2 Axle	3 Axle	4 Axle		2 Axle	3 Axle	4 Axle			2 Axle	3 Axle	4 Axle					
6 SR-79/Clinton Keith Road-Benton Road																		
NBL	0				0	0	0	0	0	0				0	0	0	0	
NBT	871	2.75%	0.98%	0.20%	837	36	18	5	896	1,414	4.01%	0.00%	0.00%	1,357	86	0	0	1,443
NBR	151	2.75%	0.98%	0.20%	145	6	2	0	153	403	4.01%	0.00%	0.00%	387	24	0	0	411
SBL	270	2.75%	0.98%	0.20%	259	11	6	3	278	273	4.01%	0.00%	0.00%	262	17	0	0	279
SBT	1,584	2.75%	0.98%	0.20%	1,522	65	32	8	1,626	1,116	4.01%	0.00%	0.00%	1,071	68	0	0	1,139
SBR	0				0	0	0	0	0	0				0	0	0	0	0
EBL	0				0	0	0	0	0	0				0	0	0	0	0
EBT	0				0	0	0	0	0	0				0	0	0	0	0
EBR	0				0	0	0	0	0	0				0	0	0	0	0
WBL	336	2.75%	0.98%	0.20%	323	14	6	3	345	281	4.01%	0.00%	0.00%	270	17	0	0	286
WBT	0				0	0	0	0	0	0				0	0	0	0	0
WBR	200	2.75%	0.98%	0.20%	192	8	4	0	204	380	4.01%	0.00%	0.00%	365	23	0	0	387
North Leg																		
Approach	1,854	0	0	0	1,781	75	38	10	1,904	1,389	0	0	0	1,333	84	0	0	1,417
Departure	1,071	0	0	0	1,029	44	22	5	1,100	1,794	0	0	0	1,722	108	0	0	1,830
Total	2,925	0	0	0	2,810	119	60	15	3,004	3,183	0	0	0	3,055	192	0	0	3,247
South Leg																		
Approach	1,022	0	0	0	982	42	20	5	1,049	1,817	0	0	0	1,744	110	0	0	1,854
Departure	1,920	0	0	0	1,845	78	38	10	1,971	1,397	0	0	0	1,341	84	0	0	1,425
Total	2,942	0	0	0	2,827	120	58	15	3,020	3,214	0	0	0	3,085	194	0	0	3,279
East Leg																		
Approach	536	0	0	0	515	21	10	3	548	661	0	0	0	635	39	0	0	674
Departure	421	0	0	0	404	17	8	3	431	676	0	0	0	649	41	0	0	689
Total	957	0	0	0	919	38	18	5	980	1,337	0	0	0	1,283	80	0	0	1,363
West Leg																		
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approaches																		
Approach	3,412	0	0	0	3,278	138	68	18	3,502	3,867	0	0	0	3,712	233	0	0	3,945
Departure	3,412	0	0	0	3,278	138	68	18	3,502	3,867	0	0	0	3,712	233	0	0	3,945
Total	6,824	0	0	0	6,556	276	136	35	7,003	7,734	0	0	0	7,424	465	0	0	7,889

Table B-3 - Existing (2014) Peak Hour Traffic Volume Summary

	AM Peak Hour									PM Peak Hour								
	Total Vehicles	Truck (%)			Passenger Vehicles	Truck PCE			Total PCE Volume	Total Vehicles	Truck (%)			Passenger Vehicles	Truck PCE			Total PCE Volume
		2 Axle	3 Axle	4 Axle		2 Axle	3 Axle	4 Axle			2 Axle	3 Axle	4 Axle		2 Axle	3 Axle	4 Axle	
7 Briggs Road/Leon Road																		
NBL	21	3.57%	0.00%	0.00%	20	2	0	0	22	36	5.56%	0.00%	0.00%	34	3	0	0	37
NBT	0	3.57%	0.00%	0.00%	0	0	0	0	0	0	5.56%	0.00%	0.00%	0	0	0	0	0
NBR	371	2.50%	0.00%	0.00%	362	14	0	0	375	459	3.92%	1.96%	0.00%	432	27	18	0	477
SBL	0	2.50%	0.00%	0.00%	0	0	0	0	0	0	3.92%	1.96%	0.00%	0	0	0	0	0
SBT	0	2.50%	0.00%	0.00%	0	0	0	0	0	0	3.92%	1.96%	0.00%	0	0	0	0	0
SBR	0	3.57%	0.00%	0.00%	0	0	0	0	0	0	5.56%	0.00%	0.00%	0	0	0	0	0
EBL	0	2.50%	0.00%	0.00%	0	0	0	0	0	0	3.92%	1.96%	0.00%	0	0	0	0	0
EBT	15	2.50%	0.00%	0.00%	15	0	0	0	15	38	3.92%	1.96%	0.00%	36	2	2	0	39
EBR	22	2.50%	0.00%	0.00%	21	2	0	0	23	28	3.92%	1.96%	0.00%	26	2	2	0	30
WBL	413	3.57%	0.00%	0.00%	398	23	0	0	421	352	5.56%	0.00%	0.00%	332	30	0	0	362
WBT	9	3.57%	0.00%	0.00%	9	0	0	0	9	50	5.56%	0.00%	0.00%	47	5	0	0	52
WBR	0	3.57%	0.00%	0.00%	0	0	0	0	0	0	5.56%	0.00%	0.00%	0	0	0	0	0
North Leg																		
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Leg																		
Approach	392	0	0	0	382	15	0	0	397	495	0	0	0	466	30	18	0	514
Departure	435	0	0	0	420	24	0	0	444	380	0	0	0	359	32	2	0	392
Total	827	0	0	0	802	39	0	0	841	875	0	0	0	825	62	20	0	906
East Leg																		
Approach	422	0	0	0	407	23	0	0	429	402	0	0	0	380	35	0	0	414
Departure	386	0	0	0	376	14	0	0	390	497	0	0	0	468	29	20	0	516
Total	808	0	0	0	783	36	0	0	819	899	0	0	0	847	63	20	0	930
West Leg																		
Approach	37	0	0	0	36	2	0	0	38	66	0	0	0	62	3	4	0	69
Departure	30	0	0	0	29	2	0	0	30	86	0	0	0	81	8	0	0	89
Total	67	0	0	0	65	3	0	0	68	152	0	0	0	143	11	4	0	158
Total Approaches																		
Approach	851	0	0	0	825	39	0	0	864	963	1	0	0	908	68	22	0	997
Departure	851	0	0	0	825	39	0	0	864	963	1	0	0	908	68	22	0	997
Total	1,702	1	0	0	1,650	78	0	0	1,728	1,926	1	0	0	1,816	135	44	0	1,995

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	<u>2,014</u>	<u>2,014</u>
	<u>Volume</u>	<u>Volume</u>
1		
Whitewood Road/Clinton Keith Road		
NBL	161	255
NBT	71	105
NBR	13	11
SBL	1	5
SBT	137	110
SBR	122	68
EBL	121	143
EBT	6	4
EBR	336	425
WBL	37	8
WBT	10	1
WBR	0	2
North Leg		
Approach	260	183
Departure	193	250
Total	453	433
South Leg		
Approach	245	371
Departure	510	542
Total	755	913
East Leg		
Approach	47	11
Departure	20	20
Total	68	31
West Leg		
Approach	463	572
Departure	293	324
Total	756	896
Total Approaches		
Approach	1,016	1,137
Departure	1,016	1,137
Total	2,032	2,273

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	2,014 Volume	2,014 Volume
2 Menifee Road/Clinton Keith Road		
NBL	11	3
NBT	5	5
NBR	5	5
SBL	5	5
SBT	5	5
SBR	11	3
EBL	5	5
EBT	2	2
EBR	5	5
WBL	5	5
WBT	11	3
WBR	5	5
North Leg		
Approach	21	13
Departure	15	15
Total	37	28
South Leg		
Approach	21	13
Departure	15	15
Total	36	28
East Leg		
Approach	21	13
Departure	12	12
Total	33	25
West Leg		
Approach	12	12
Departure	33	9
Total	46	21
Total Approaches		
Approach	76	52
Departure	76	52
Total	152	103

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	2,014 Volume	2,014 Volume
3		
Trois Valley Street/Clinton Keith Road		
NBL	0	0
NBT	0	0
NBR	0	0
SBL	36	24
SBT	0	0
SBR	0	0
EBL	0	0
EBT	0	0
EBR	0	0
WBL	0	0
WBT	0	0
WBR	12	41
North Leg		
Approach	36	24
Departure	12	41
Total	48	66
South Leg		
Approach	0	0
Departure	0	0
Total	0	0
East Leg		
Approach	12	41
Departure	36	24
Total	48	66
West Leg		
Approach	0	0
Departure	0	0
Total	0	0
Total Approaches		
Approach	48	66
Departure	48	66
Total	96	132

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u> 2,014 Volume	<u>P.M. Peak Hour</u> 2,014 Volume
4	Clinton Keith Road/Leon Road	
NBL	0	0
NBT	0	0
NBR	0	0
SBL	31	75
SBT	0	0
SBR	0	0
EBL	0	0
EBT	0	0
EBR	0	0
WBL	0	0
WBT	0	0
WBR	38	58
North Leg		
Approach	31	75
Departure	38	58
Total	69	133
South Leg		
Approach	0	0
Departure	0	0
Total	0	0
East Leg		
Approach	38	58
Departure	31	75
Total	69	133
West Leg		
Approach	0	0
Departure	0	0
Total	0	0
Total Approaches		
Approach	69	133
Departure	69	133
Total	138	265

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	2,014 Volume	2,014 Volume
6		
SR-79/Clinton Keith Road-Benton Road		
NBL	0	0
NBT	896	1,443
NBR	153	411
SBL	278	279
SBT	1,626	1,139
SBR	0	0
EBL	0	0
EBT	0	0
EBR	0	0
WBL	345	286
WBT	0	0
WBR	204	387
North Leg		
Approach	1,904	1,417
Departure	1,100	1,830
Total	3,004	3,247
South Leg		
Approach	1,049	1,854
Departure	1,971	1,425
Total	3,020	3,279
East Leg		
Approach	548	674
Departure	431	689
Total	980	1,363
West Leg		
Approach	0	0
Departure	0	0
Total	0	0
Total Approaches		
Approach	3,502	3,945
Departure	3,502	3,945
Total	7,003	7,889

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u> <u>2,014</u> <u>Volume</u>	<u>P.M. Peak Hour</u> <u>2,014</u> <u>Volume</u>
7 Briggs Road/Leon Road		
NBL	22	37
NBT	0	0
NBR	375	477
SBL	0	0
SBT	0	0
SBR	0	0
EBL	0	0
EBT	15	39
EBR	23	30
WBL	421	362
WBT	9	52
WBR	0	0
North Leg		
Approach	0	0
Departure	0	0
Total	0	0
South Leg		
Approach	397	514
Departure	444	392
Total	841	906
East Leg		
Approach	429	414
Departure	390	516
Total	819	930
West Leg		
Approach	38	69
Departure	30	89
Total	68	158
Total Approaches		
Approach	864	997
Departure	864	997
Total	1,728	1,995

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	2,014 Volume	2,014 Volume
8 Max Gillis Boulevard/Leon Road		
NBL	169	17
NBT	53	99
NBR	96	218
SBL	197	246
SBT	47	30
SBR	149	8
EBL	124	3
EBT	360	78
EBR	131	28
WBL	212	160
WBT	366	125
WBR	151	257
North Leg		
Approach	393	285
Departure	329	359
Total	722	644
South Leg		
Approach	318	335
Departure	391	219
Total	709	554
East Leg		
Approach	730	542
Departure	653	542
Total	1,383	1,084
West Leg		
Approach	616	109
Departure	684	150
Total	1,300	259
Total Approaches		
Approach	2,057	1,271
Departure	2,057	1,271
Total	4,114	2,541

Table B-4 - Total Existing (2014) Peak Hour Traffic Volume Summary

	<u>A.M. Peak Hour</u>	<u>P.M. Peak Hour</u>
	<u>2,014</u> Volume	<u>2,014</u> Volume
9 SR-79 /Max Gillis Boulevard		
NBL	321	394
NBT	547	1,304
NBR	65	259
SBL	19	19
SBT	950	632
SBR	51	28
EBL	49	56
EBT	101	134
EBR	506	345
WBL	210	167
WBT	215	104
WBR	25	14
North Leg		
Approach	1,020	680
Departure	621	1,374
Total	1,641	2,054
South Leg		
Approach	933	1,958
Departure	1,666	1,144
Total	2,599	3,102
East Leg		
Approach	451	286
Departure	186	412
Total	637	698
West Leg		
Approach	656	534
Departure	587	527
Total	1,243	1,061
Total Approaches		
Approach	3,059	3,458
Departure	3,059	3,458
Total	6,119	6,915

Table B-5 - Existing (2014) With 6-Lanes Adjusted Peak Hour Volume Summary

	A.M Peak Hour			P.M Peak Hour		
	2,014 Volume	Adjustment	2014 With Adj. Volume	2,014 Volume	Adjustment	2014 With Adj. Volume
2 Menifee Road/Clinton Keith Road						
NBL	11	-69.27%	10	3	-78.75%	3
NBT	5	-69.27%	5	5	-78.75%	5
NBR	5	-69.27%	5	5	-78.75%	5
SBL	5	-69.27%	5	5	-78.75%	5
SBT	5	-69.27%	5	5	-78.75%	5
SBR	11	-69.27%	10	3	-78.75%	3
EBL	5	291.53%	5	5	219.73%	5
EBT	2	291.53%	2	2	219.73%	2
EBR	5	291.53%	5	5	219.73%	5
WBL	5	291.53%	5	5	219.73%	5
WBT	11	291.53%	10	3	219.73%	3
WBR	5	291.53%	5	5	219.73%	5
North Leg						
Approach	21	-2	20	13	-2	12
Departure	15	5	14	15	4	14
Total	37	3	34	28	1	27
South Leg						
Approach	21	-2	20	13	-2	12
Departure	15	5	14	15	4	14
Total	36	3	34	28	1	26
East Leg						
Approach	21	9	20	13	7	12
Departure	12	2	11	12	1	11
Total	33	10	31	25	7	24
West Leg						
Approach	12	9	11	12	7	11
Departure	33	2	31	9	1	9
Total	46	10	43	21	7	20
Total Approaches						
Approach	76	13	71	52	8	48
Departure	76	13	71	52	8	48
Total	152	27	142	103	17	96

Table B-5 - Existing (2014) With 6-Lanes Adjusted Peak Hour Volume Summary

	A.M Peak Hour			P.M Peak Hour		
	2,014 Volume	Adjustment	2014 With Adj. Volume	2,014 Volume	Adjustment	2014 With Adj. Volume
6 SR-79/Clinton Keith Road-Benton Road						
NBL	0	-6.33%	0	0	3.10%	0
NBT	896	-6.33%	839	1,443	3.10%	1,488
NBR	153	-6.33%	143	411	3.10%	424
SBL	278	-6.33%	261	279	3.10%	287
SBT	1,626	-6.33%	1,523	1,139	3.10%	1,174
SBR	0	-6.33%	0	0	3.10%	0
EBL	0	115.22%	0	0	113.95%	0
EBT	0	115.22%	0	0	113.95%	0
EBR	0	115.22%	0	0	113.95%	0
WBL	345	115.22%	742	286	113.95%	612
WBT	0	115.22%	0	0	113.95%	0
WBR	204	115.22%	438	387	113.95%	829
North Leg						
Approach	1,904	0	1,784	1,417	0	1,461
Departure	1,100	2	1,277	1,830	2	2,316
Total	3,004	2	3,061	3,247	2	3,777
South Leg						
Approach	1,049	0	982	1,854	0	1,911
Departure	1,971	2	2,265	1,425	2	1,786
Total	3,020	2	3,248	3,279	2	3,698
East Leg						
Approach	548	3	1,180	674	3	1,441
Departure	431	1	404	689	1	711
Total	980	4	1,585	1,363	5	2,152
West Leg						
Approach	0	3	0	0	3	0
Departure	0	1	0	0	1	0
Total	0	4	0	0	5	0
Total Approaches						
Approach	3,502	7	3,947	3,945	7	4,813
Departure	3,502	7	3,947	3,945	7	4,813
Total	7,003	13	7,893	7,889	14	9,627

Table B-5 - Existing (2014) With 6-Lanes Adjusted Peak Hour Volume Summary

	A.M Peak Hour			P.M Peak Hour		
	2,014 Volume	Adjustment	2014 With Adj. Volume	2,014 Volume	Adjustment	2014 With Adj. Volume
8 Max Gillis Boulevard/Leon Road						
NBL	169	8.37%	183	17	-11.65%	15
NBT	53	8.37%	57	99	-11.65%	88
NBR	96	8.37%	104	218	-11.65%	193
SBL	197	8.37%	214	246	-11.65%	217
SBT	47	8.37%	51	30	-11.65%	27
SBR	149	8.37%	162	8	-11.65%	7
EBL	124	72.66%	215	3	34.89%	4
EBT	360	72.66%	622	78	34.89%	105
EBR	131	72.66%	227	28	34.89%	38
WBL	212	72.66%	367	160	34.89%	216
WBT	366	72.66%	632	125	34.89%	168
WBR	151	72.66%	262	257	34.89%	346
North Leg						
Approach	393	0	426	285	0	252
Departure	329	2	533	359	1	438
Total	722	2	959	644	0	690
South Leg						
Approach	318	0	345	335	0	296
Departure	391	2	644	219	1	281
Total	709	2	989	554	0	577
East Leg						
Approach	730	2	1,260	542	1	731
Departure	653	1	939	542	0	515
Total	1,383	3	2,200	1,084	1	1,246
West Leg						
Approach	616	2	1,063	109	1	147
Departure	684	1	977	150	0	191
Total	1,300	3	2,040	259	1	338
Total Approaches						
Approach	2,057	5	3,094	1,271	1	1,426
Departure	2,057	5	3,094	1,271	1	1,426
Total	4,114	10	6,188	2,541	3	2,851

Table B-5 - Existing (2014) With 6-Lanes Adjusted Peak Hour Volume Summary

	A.M Peak Hour			P.M Peak Hour		
	2,014 Volume	Adjustment	2014 With Adj. Volume	2,014 Volume	Adjustment	2014 With Adj. Volume
9 SR-79 /Max Gillis Boulevard						
NBL	321	20.33%	386	394	22.05%	481
NBT	547	20.33%	658	1,304	22.05%	1,592
NBR	65	20.33%	78	259	22.05%	317
SBL	19	20.33%	23	19	22.05%	23
SBT	950	20.33%	1,143	632	22.05%	771
SBR	51	20.33%	61	28	22.05%	35
EBL	49	-7.35%	45	56	-17.32%	46
EBT	101	-7.35%	94	134	-17.32%	110
EBR	506	-7.35%	469	345	-17.32%	285
WBL	210	-7.35%	195	167	-17.32%	138
WBT	215	-7.35%	200	104	-17.32%	86
WBR	25	-7.35%	23	14	-17.32%	12
North Leg						
Approach	1,020	1	1,227	680	1	830
Departure	621	0	727	1,374	0	1,650
Total	1,641	1	1,954	2,054	1	2,479
South Leg						
Approach	933	1	1,122	1,958	1	2,390
Departure	1,666	0	1,807	1,144	0	1,195
Total	2,599	1	2,929	3,102	1	3,585
East Leg						
Approach	451	0	418	286	-1	236
Departure	186	0	195	412	0	451
Total	637	0	613	698	0	687
West Leg						
Approach	656	0	608	534	-1	442
Departure	587	0	646	527	0	602
Total	1,243	0	1,254	1,061	0	1,044
Total Approaches						
Approach	3,059	1	3,375	3,458	0	3,897
Departure	3,059	1	3,375	3,458	0	3,897
Total	6,119	2	6,750	6,915	1	7,794

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

			Base Year Link Volume	Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Base to Future Year		"New" Link Volume ¹	2035 Link Volume
2014 Adj. Volume			Volume	Volume	Volume	Pk. Per. Change	Pk. Hr. Change	Volume ¹	Volume
1 Whitewood Road/Clinton Keith Road									
AM Peak Hour									
Northbound	Left	Approach	234	389	2,103	1,714	651	258	492
	Through Right		Departure	339	532	3,255	2,723	1,035	410
Southbound	Left	Approach	216	248	2,674	2,426	922	365	581
	Through Right		Departure	125	162	1,425	1,263	480	190
Eastbound	Left	Approach	1,054	2,267	6,109	3,842	1,460	578	1,633
	Through Right		Departure	689	1,483	3,975	2,492	947	375
Westbound	Left	Approach	691	1,361	4,822	3,461	1,315	521	1,212
	Through Right		Departure	1,042	2,087	7,053	4,966	1,887	748
PM Peak Hour									
Northbound	Left	Approach	301	653	3,848	3,195	895	354	655
	Through Right		Departure	326	854	3,202	2,348	657	260
Southbound	Left	Approach	393	1,121	3,273	2,152	603	239	632
	Through Right		Departure	167	282	2,676	2,394	670	266
Eastbound	Left	Approach	717	2,078	5,731	3,653	1,023	405	1,122
	Through Right		Departure	864	2,275	8,424	6,149	1,722	682
Westbound	Left	Approach	839	2,028	9,348	7,320	2,050	812	1,651
	Through Right		Departure	892	2,469	7,898	5,429	1,520	602

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

			Base Year Link	Base Yr. Modeled Pk. Per.	Fut. Yr. Modeled Pk. Per.	Base to Future Year		"New" Link Volume ¹	2035 Link Volume	
2014 Adj. Volume			Volume	Volume	Volume	Pk. Per. Change	Pk. Hr. Change			
2 Menifee Road/Clinton Keith Road										
AM Peak Hour										
Northbound	Left	10	Approach	152	370	595	225	86	34	186
	Through	5	Departure	136	200	1,392	1,192	453	179	315
	Right	5								
Southbound	Left	5	Approach	33	15	552	537	204	81	114
	Through	5	Departure	13	14	159	145	55	22	34
	Right	10								
Eastbound	Left	5	Approach	1,049	2,103	7,075	4,972	1,889	749	1,797
	Through	2	Departure	697	1,377	4,845	3,468	1,318	522	1,219
	Right	5								
Westbound	Left	5	Approach	736	1,464	5,035	3,571	1,357	538	1,273
	Through	10	Departure	1,123	2,362	6,861	4,499	1,710	677	1,801
	Right	5								
PM Peak Hour										
Northbound	Left	3	Approach	130	260	1,801	1,541	431	171	301
	Through	5	Departure	132	382	1,071	689	193	76	209
	Right	5								
Southbound	Left	5	Approach	22	36	364	328	92	36	59
	Through	5	Departure	16	10	375	365	102	40	57
	Right	3								
Eastbound	Left	5	Approach	903	2,508	7,947	5,439	1,523	603	1,507
	Through	2	Departure	845	2,049	9,375	7,326	2,051	813	1,657
	Right	5								
Westbound	Left	5	Approach	855	2,206	8,616	6,410	1,795	711	1,566
	Through	3	Departure	917	2,570	7,907	5,337	1,494	592	1,509
	Right	5								

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

		2014 Adj. Volume		Base	Base Yr.	Fut. Yr.	Base to Future Year		"New"	2035
				Year Link Volume	Modeled Pk. Per. Volume	Modeled Pk. Per. Volume	Pk. Per. Change	Pk. Hr. Change	Link Volume ¹	Link Volume
3 Trois Valley Street/Clinton Keith Road										
AM Peak Hour										
Northbound	Left	0	Approach	0	0	0	0	0	0	0
	Through	0	Departure	0	0	0	0	0	0	0
	Right	0								
Southbound	Left	0	Approach	36	0	0	0	0	0	36
	Through	0	Departure	12	0	0	0	0	0	12
	Right	36								
Eastbound	Left	Base Year Model Volumes Adjusted to	Approach	1,123	2,362	6,861	4,499	1,710	677	1,801
	Through		Departure	736	1,464	5,035	3,571	1,357	538	1,273
	Right									
Westbound	Left	Base Year Model Volumes Adjusted to	Approach	736	1,464	5,035	3,571	1,357	538	1,273
	Through		Departure	1,123	2,362	6,861	4,499	1,710	677	1,801
	Right									
PM Peak Hour										
Northbound	Left	0	Approach	0	0	0	0	0	0	0
	Through	0	Departure	0	0	0	0	0	0	0
	Right	0								
Southbound	Left	2	Approach	24	0	0	0	0	0	24
	Through	0	Departure	41	0	0	0	0	0	41
	Right	22								
Eastbound	Left	Base Year Model Volumes Adjusted to	Approach	917	2,570	7,907	5,337	1,494	592	1,509
	Through		Departure	855	2,206	8,616	6,410	1,795	711	1,566
	Right									
Westbound	Left	Base Year Model Volumes Adjusted to	Approach	855	2,206	8,616	6,410	1,795	711	1,566
	Through		Departure	917	2,570	7,907	5,337	1,494	592	1,509
	Right									

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

	2014 Adj. Volume		Base	Base Yr.	Fut. Yr.	Base to Future Year		"New"	2035	
			Year Link Volume	Modeled Pk. Per. Volume	Modeled Pk. Per. Volume	Pk. Per. Change	Pk. Hr. Change	Link Volume ¹	Link Volume	
4 Clinton Keith Road/Leon Road										
AM Peak Hour										
Northbound		Left	Approach	373	565	3,727	3,162	1,202	476	849
		Through	Departure	639	925	6,653	5,728	2,177	862	1,501
		Right								
Southbound		Left	Approach	1,123	2,362	6,861	4,499	1,710	677	1,801
		Through	Departure	736	1,465	5,035	3,570	1,357	538	1,273
		Right								
Eastbound		Left	Approach	0	0	0	0	0	0	0
		Through	Departure	0	0	0	0	0	0	0
		Right								
Westbound		Left	Approach	711	1,352	5,278	3,926	1,492	591	1,302
		Through	Departure	833	1,889	4,178	2,289	870	345	1,177
		Right								
PM Peak Hour										
Northbound		Left	Approach	530	976	7,908	6,932	1,941	769	1,299
		Through	Departure	651	1,740	6,156	4,416	1,236	490	1,140
		Right								
Southbound		Left	Approach	917	2,570	7,907	5,337	1,494	592	1,509
		Through	Departure	855	2,206	8,616	6,410	1,795	711	1,566
		Right								
Eastbound		Left	Approach	0	0	0	0	0	0	0
		Through	Departure	0	0	0	0	0	0	0
		Right								
Westbound		Left	Approach	745	2,161	5,938	3,777	1,058	419	1,164
		Through	Departure	686	1,761	6,981	5,220	1,462	579	1,265
		Right								

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

	2014 Adj. Volume		Base	Base Yr.	Fut. Yr.	Base to Future Year		"New"	2035
			Year Link Volume	Modeled Pk. Per. Volume	Modeled Pk. Per. Volume	Pk. Per. Change	Pk. Hr. Change	Link Volume ¹	Link Volume
5 Porth Road/Clinton Keith Road									
AM Peak Hour									
Northbound	Left	Approach	412	608	4,217	3,609	1,371	543	956
			Through Right	Departure	684	1,014	6,973	5,959	2,264
Southbound	Left	Approach		639	925	6,653	5,728	2,177	862
			Through Right	Departure	373	565	3,727	3,162	1,202
Eastbound	Left	Approach		59	99	527	428	163	64
			Through Right	Departure	52	53	697	644	245
Westbound	Left	Approach		0	0	0	0	0	0
			Through Right	Departure	0	0	0	0	0
PM Peak Hour									
Northbound	Left	Approach	581	1,103	8,460	7,357	2,060	816	1,397
			Through Right	Departure	713	1,855	7,079	5,224	1,463
Southbound	Left	Approach		651	1,740	6,156	4,416	1,236	490
			Through Right	Departure	530	976	7,908	6,932	1,941
Eastbound	Left	Approach		85	134	1,425	1,291	361	143
			Through Right	Departure	74	146	1,054	908	254
Westbound	Left	Approach		0	0	0	0	0	0
			Through Right	Departure	0	0	0	0	0

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

			Base Year Link Volume	Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Base to Future Year		"New" Link Volume ¹	2035 Link Volume	
2014 Adj. Volume						Pk. Per. Change	Pk. Hr. Change			
6 SR-79/Clinton Keith Road-Benton Road										
AM Peak Hour										
Northbound	Left	0	Approach	982	2,068	7,195	5,127	1,948	772	1,754
	Through	839	Departure	2,265	3,315	10,174	6,859	2,606	1,033	3,298
	Right	143								
Southbound	Left	261	Approach	1,784	2,831	6,312	3,481	1,323	524	2,308
	Through	1,523	Departure	1,277	1,783	5,159	3,376	1,283	508	1,786
	Right	0								
Eastbound	Left	0	Approach	688	1,025	6,978	5,953	2,262	896	1,585
	Through	0	Departure	418	618	4,277	3,659	1,390	551	969
	Right	0								
Westbound	Left	742	Approach	1,180	354	2,705	2,351	893	354	1,534
	Through	0	Departure	404	562	3,580	3,018	1,147	454	859
	Right	438								
PM Peak Hour										
Northbound	Left	0	Approach	1,911	4,835	13,510	8,675	2,429	962	2,874
	Through	1,488	Departure	1,786	5,703	13,194	7,491	2,097	831	2,618
	Right	424								
Southbound	Left	287	Approach	1,461	4,610	9,654	5,044	1,412	560	2,021
	Through	1,174	Departure	2,316	4,411	9,668	5,257	1,472	583	2,899
	Right	0								
Eastbound	Left	0	Approach	724	1,881	7,215	5,334	1,494	592	1,316
	Through	0	Departure	586	1,121	8,479	7,358	2,060	816	1,402
	Right	0								
Westbound	Left	612	Approach	1,441	746	5,394	4,648	1,301	516	1,957
	Through	0	Departure	711	837	4,432	3,595	1,007	399	1,110
	Right	829								

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

		2014 Adj. Volume		Base Year Link Volume	Base Yr. Modeled Pk. Per. Volume	Fut. Yr. Modeled Pk. Per. Volume	Base to Future Year		"New" Link Volume ¹	2035 Link Volume
							Pk. Per. Change	Pk. Hr. Change		
8 Max Gillis Boulevard/Leon Road										
AM Peak Hour										
Northbound	Left	183	Approach	345	1,531	4,378	2,847	1,082	429	773
	Through	57	Departure	644	2,053	5,228	3,175	1,207	478	1,122
	Right	104								
Southbound	Left	214	Approach	426	620	4,408	3,788	1,439	570	996
	Through	51	Departure	533	625	2,898	2,273	864	342	876
	Right	162								
Eastbound	Left	215	Approach	1,063	1,875	4,109	2,234	849	336	1,399
	Through	622	Departure	977	1,336	5,194	3,858	1,466	581	1,558
	Right	227								
Westbound	Left	367	Approach	1,260	194	1,785	1,591	605	240	1,500
	Through	632	Departure	939	207	1,360	1,153	438	174	1,113
	Right	262								
PM Peak Hour										
Northbound	Left	15	Approach	296	1,875	6,078	4,203	1,177	466	762
	Through	88	Departure	281	2,428	6,552	4,124	1,155	458	739
	Right	193								
Southbound	Left	217	Approach	252	1,478	4,532	3,054	855	339	590
	Through	27	Departure	438	663	5,502	4,839	1,355	537	975
	Right	7								
Eastbound	Left	4	Approach	147	1,728	6,836	5,108	1,430	567	714
	Through	105	Departure	191	2,139	5,820	3,681	1,031	408	599
	Right	38								
Westbound	Left	216	Approach	731	459	3,419	2,960	829	328	1,059
	Through	168	Departure	515	310	2,991	2,681	751	297	813
	Right	346								

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth.

Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

Clinton Keith Road Extension Traffic Operations Analysis
Table B-6 - Forecast Year 2035 With 6-Lanes Peak Hour Link Volume Worksheets

		2014 Adj. Volume		Base	Base Yr.	Fut. Yr.	Base to Future Year		"New"	2035
				Year	Modeled	Modeled	Pk. Per.	Pk. Per.	Pk. Hr.	Link
			Link	Volume	Volume	Volume	Change	Change	Volume ¹	Volume
9	SR-79 /Max Gillis Boulevard									
AM Peak Hour										
Northbound	Left	386	Approach	1,122	1,783	5,160	3,377	1,283	508	1,631
	Through	658	Departure	1,807	2,831	6,313	3,482	1,323	524	2,331
	Right	78								
Southbound	Left	23	Approach	1,227	3,262	8,285	5,023	1,909	756	1,984
	Through	1,143	Departure	727	3,167	8,028	4,861	1,847	732	1,459
	Right	61								
Eastbound	Left	45	Approach	608	2,080	5,338	3,258	1,238	491	1,098
	Through	94	Departure	646	1,538	4,404	2,866	1,089	432	1,078
	Right	469								
Westbound	Left	195	Approach	418	1,071	3,295	2,224	845	335	753
	Through	200	Departure	195	659	3,333	2,674	1,016	403	598
	Right	23								
PM Peak Hour										
Northbound	Left	481	Approach	2,390	4,411	9,668	5,257	1,472	583	2,973
	Through	1,592	Departure	1,195	4,611	9,654	5,043	1,412	559	1,754
	Right	317								
Southbound	Left	23	Approach	830	5,613	12,039	6,426	1,799	713	1,542
	Through	771	Departure	1,650	5,063	12,933	7,870	2,204	873	2,523
	Right	35								
Eastbound	Left	46	Approach	442	2,457	6,636	4,179	1,170	464	905
	Through	110	Departure	602	1,908	6,201	4,293	1,202	476	1,078
	Right	285								
Westbound	Left	138	Approach	236	1,099	5,813	4,714	1,320	523	759
	Through	86	Departure	451	1,998	5,368	3,370	944	374	824
	Right	12								

¹ For vehicles, modeled base year (2007) to modeled future year (2060) conditions represent 53 years of traffic growth. Since it is 21 years from 2014 (base count conditions) to 2035 (Analysis Year), the 'new link volume' represents 39.62% of the modeled growth.

**Table B-7 - Calculation of Future Directional Turn Volumes From
Future Directional Link Volumes (NCHRP 255)
Year 2035 With 6-Lanes Conditions**

Approach Direction		Base Year Count*	Forecast Future Year			
			Link Volume		Link Volume	Turn Volume
1 Whitewood Road/Clinton Keith Road						
A.M. Peak Hour						
Northbound	Left	125	Approach	492	Left	169
	Through	60	Departure	749	Through	91
	Right	81			Right	232
Southbound	Left	77	Approach	581	Left	187
	Through	102	Departure	315	Through	281
	Right	98			Right	113
Eastbound	Left	42	Approach	1,633	Left	86
	Through	353	Departure	1,064	Through	1,371
	Right	41			Right	181
Westbound	Left	73	Approach	1,212	Left	287
	Through	476	Departure	1,790	Through	782
	Right	75			Right	138
P.M. Peak Hour						
Northbound	Left	109	Approach	655	Left	222
	Through	60	Departure	586	Through	122
	Right	48			Right	312
Southbound	Left	46	Approach	632	Left	296
	Through	52	Departure	433	Through	200
	Right	68			Right	137
Eastbound	Left	179	Approach	1,122	Left	84
	Through	593	Departure	1,547	Through	887
	Right	175			Right	157
Westbound	Left	46	Approach	1,651	Left	229
	Through	454	Departure	1,494	Through	1,187
	Right	87			Right	227

* Base Year Counts taken from the intersection of Menifee Road and Scott Road.

**Table B-7 - Calculation of Future Directional Turn Volumes From
Future Directional Link Volumes (NCHRP 255)
Year 2035 With 6-Lanes Conditions**

Approach Direction		Base Year Count*	Forecast Future Year			
			Link Volume		Link Volume	Turn Volume
2 Menifee Road/Clinton Keith Road						
A.M. Peak Hour						
Northbound	Left	125	Approach	186	Left	95
	Through	60	Departure	315	Through	4
	Right	81			Right	86
Southbound	Left	77	Approach	114	Left	41
	Through	102	Departure	34	Through	35
	Right	98			Right	37
Eastbound	Left	42	Approach	1,797	Left	14
	Through	353	Departure	1,219	Through	1,674
	Right	41			Right	128
Westbound	Left	73	Approach	1,273	Left	152
	Through	476	Departure	1,801	Through	1,087
	Right	75			Right	16
P.M. Peak Hour						
Northbound	Left	109	Approach	301	Left	176
	Through	60	Departure	209	Through	8
	Right	48			Right	116
Southbound	Left	46	Approach	59	Left	25
	Through	52	Departure	57	Through	9
	Right	68			Right	25
Eastbound	Left	179	Approach	1,507	Left	24
	Through	593	Departure	1,657	Through	1,368
	Right	175			Right	129
Westbound	Left	46	Approach	1,566	Left	71
	Through	454	Departure	1,509	Through	1,457
	Right	87			Right	24

* Base Year Counts taken from the intersection of Menifee Road and Scott Road.

**Table B-7 - Calculation of Future Directional Turn Volumes From
Future Directional Link Volumes (NCHRP 255)
Year 2035 With 6-Lanes Conditions**

Approach Direction	Base Year Count*	Forecast Future Year				
		Link Volume	Link Volume	Turn Volume	Turn Volume	
3 Trois Valley Street/Clinton Keith Road						
A.M. Peak Hour						
Northbound	Left		Approach	0	Left	0
	Through		Departure	0	Through	0
	Right				Right	0
Southbound	Left	10	Approach	36	Left	17
	Through		Departure	12	Through	0
	Right	11			Right	19
Eastbound	Left	8	Approach	1,801	Left	5
	Through	222	Departure	1,273	Through	1,784
	Right				Right	0
Westbound	Left		Approach	1,273	Left	0
	Through	209	Departure	1,801	Through	1,254
	Right	14			Right	7
P.M. Peak Hour						
Northbound	Left		Approach	0	Left	0
	Through		Departure	0	Through	0
	Right				Right	0
Southbound	Left	6	Approach	24	Left	11
	Through		Departure	41	Through	0
	Right	8			Right	13
Eastbound	Left	14	Approach	1,509	Left	32
	Through	246	Departure	1,566	Through	1,498
	Right				Right	0
Westbound	Left		Approach	1,566	Left	0
	Through	220	Departure	1,509	Through	1,553
	Right	3			Right	9

* Base Year Counts for applicable turn movements taken from the intersection of Leon Road and Scott