## M E M O

To: $\quad$ Natalie Porter, El Dorado Long Range Planning<br>From: Jonathan Flecker, KDA<br>Date: September 27, 2017<br>Re: Update to Piedmont Oak Estates Traffic Impact Analysis

We have updated two scenarios of the Piedmont Oak Estates traffic study completed December 19, 2014. The previous short term future scenario has been revised to reflect the County's current TIS standard of 10 years from Existing, i.e. 2027. The Cumulative 2035 scenario has also been updated to reflect the County's current travel demand model. In addition, the project's residential component has been reduced, from 104 single family residential (SFR) units to 75 SFR units.

New traffic counts were completed along Missouri Flat Road during the first week of May 2017. These counts were compared to the traffic volumes used in the previously completed traffic study and included peak hour traffic volume counts presented in the Diamond Springs El Dorado Area Mobility and Livable Community Plan technical report, as well as supplemental traffic counts conducted in July 2014. The July counts were adjusted based on turning movement counts that were conducted at adjacent intersections while school was in session.

The intersection traffic was reviewed to determine the percentage increase or decrease in traffic volumes between 2014 and 2017. Eight intersections experienced increases in traffic volumes of $8.0 \%$ or less while three intersections, Missouri Flat Road at Industrial Drive, Missouri Flat Road at Enterprise Drive and Missouri Flat Road at Pleasant Valley Road experienced traffic volume increases of up to $11.4 \%$. Generally accepted practice is to conduct peak hour traffic counts for one day during the mid-week (Tuesday, Wednesday or Thursday) during a typical week. Traffic counts will vary daily and the FHWA's Traffic Monitoring Guide identifies that volumes within a $10 \%$ variance are acceptable. The majority of intersections meet the FHWA criteria.

Based on this information and an evaluation of the variance in traffic volumes between 2014 and 2017, the traffic volumes used in preparation of the December 2014 report were used as the basis for existing conditions. A new existing analysis was therefore not undertaken, as all intersections previously operated within acceptable County Level of Service (LOS) thresholds.

## ATTACHMENT 15

## NEAR TERM (2027) AND LONG TERM (2035) CUMULATIVE IMPACTS

The County's Travel Demand Model (TDM) forecasts for 2035 are the basis for projecting Near Term and Cumulative intersection turning movements.

The analysis of the long range 2035 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2035.

## Roadway Conditions

Roadways in 2035 are generally projected to remain with their current lane configurations with the following changes to the roadway network:

- The Diamond Springs Parkway, north of China Garden Road, will connect Missouri Flat Road to Diamond Road (SR 49) and is projected to be completed by 2027. This roadway will include two through lanes in each direction with turn lanes at key intersections. Missouri Flat Road will become the west and south legs of the Missouri Flat Road / Diamond Springs Parkway intersection.
- Missouri Flat Road south of Diamond Springs Parkway will be widened to include two through lanes in each direction by 2035.
- Installation of a traffic signal at the Missouri Flat Road / Industrial Drive intersection as identified in the El Dorado County Public Safety Facility Project Draft EIR.
- Side street approaches to the Missouri Flat Road / China Garden Road intersection will be limited to right turns only as a result of the mitigations identified in the $E l$ Dorado County Public Safety Facility Project Draft EIR. While the DEIR noted two alternative mitigations for this intersection, County staff determined that installation of a traffic signal at China Garden Road is not the preferred alternative based on the installation of the traffic signal at Industrial Drive as noted above.
- The Missouri Flat Road / Diamond Springs Parkway intersection will include two left turn lanes and a through-right lane along the northbound approach, a left turn lane, two through lanes and a right turn lane along the eastbound approach, a single lane along the southbound approach and a left turn lane, a through lane and a through-right lane on the westbound approach. The intersection will be signalized.
- The Diamond Drive / Diamond Springs Parkway intersection will consist of two northbound left turn lanes and a through lane along the northbound approach while the southbound approach will include a through lane and a right turn lane. The
eastbound approach will include a right turn lane and a left turn lane. This intersection will be signalized.
- The Diamond Springs Parkway / Throwita Way intersection will consist of two eastbound through lanes, a left turn lane and a right turn lane while the westbound approach will consist of a left turn lane, a through lane and a shared through-right lane. The northbound approach will consist of a left turn lane and a shared throughright lane while the southbound approach is a shared left-through-right lane. This intersection will be signalized.


## 2035 Traffic Forecasts

Year 2035 traffic forecasts were based on the most recent countywide traffic model modified to include the four-lane section of Missouri Flat Road south of Diamond Springs Parkway. Projected 2035 roadway volumes along Missouri Flat Road were reviewed and approved by County staff as part of the Creekside Center Traffic Impact Analysis.

Two methods described below were used to develop forecasts of future Year 2035 peak hour intersection turning movement traffic volumes on other roadways for this traffic impact study:

Method \#1 was used at existing intersections that would not have legs added to the intersection in the future, and would not experience substantial unbalanced increases in traffic volumes (substantial increases in traffic volumes on some legs of the intersection, but not on other legs of the intersection). At these intersections, existing turning movement count data are available, and can be increased by application of model-generated growth factors. The intersection of Missouri Flat and Forni Road is an example of an intersection in this category.

Method \#2 was used at new intersections, intersections that would have added legs in the future, or would experience substantial unbalanced increases in traffic volumes. At these intersections, existing turning movement count data are not available, or cannot be validly increased by application of model-generated growth factors. The intersection of Diamond Springs Parkway and Missouri Flat Road is example of an intersection in this category.

Method \#1. In Method \#1, peak hour traffic volumes from the travel model was used to generate growth factors. These growth factors were applied to existing peak hour intersection turning movement traffic volumes. The development of future year intersection turning movement traffic volumes requires that the turning movements at each intersection "balance". To achieve the balance, inbound traffic volumes must equal the outbound traffic volumes, and the volumes must be distributed among the various left-turn, through, and right-turn movements at each intersection. The "balancing" of future year intersection turning movement traffic
volumes was conducted using methods described in the Transportation Research Board's (TRB's) National Cooperative Highway Research Program (NCHRP) Report 255, Highway Traffic Data for Urbanized Area Project Planning and Design. The NCHRP 255 method applies the desired peak hour directional volumes to the intersection turning movement volumes, using an iterative process to balance and adjust the resulting forecasts to match the desired peak hour directional volumes.

Method \#2. In Method \#2, where the road configuration is expected to change between the current year and 2035 the model forecasts were used to determine approach and departure volumes at the new intersections. As noted in the County's TIS Guidelines the forecasted model volumes were reviewed for reasonableness and adjusted as necessary. Balancing of the future turning movement traffic volumes were again conducted using the methods from NCHRP 255.

## Near Term Traffic Conditions

Near Term traffic forecasts were based on the conditions projected ten years from Existing conditions (2027) using straight line interpolation between existing volumes and 2035 projections. The roadway network was evaluated in this scenario based on the County's 10 -year CIP. This included construction of the Diamond Springs Parkway, but excludes widening of Missouri Flat Road south of China Garden Road.

Intersection turning movements for Near Term 2027 conditions are presented in Figure 1.
Intersection Levels of Service. Year 2027 volumes were used to calculate operating Levels of Service at selected intersections. Table 1 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2027 condition. All intersections will operate within the County's LOS thresholds, at LOS E or better.

Traffic Signal Warrants. The Pleasant Valley Road / SR 49-South intersection meets the peak hour signal warrant in both the a.m. and p.m. peak hours while operating at a worst-case LOS D.

Intersection Queues. Table 2 presents information regarding 2027 peak period queuing in lanes at signalized study intersections. In each case, the available storage has been presented along with current peak hour traffic volumes and the $95^{\text {th }}$ percentile queue length. On multiple lane approaches the longest queue amongst a group of common lanes has been noted.

Most intersections have lane storage capacity that can accommodate peak period queues. Those $95^{\text {th }}$ percentile queues with length exceeding the available storage have been highlighted. The $95^{\text {th }}$ percentile queue exceeds available storage in twelve locations.

|  |  |  | 4 |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat |  <br> Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> qR1-1 $^{1}$ $\begin{aligned} & \leftarrow \begin{array}{l} 320(295) \\ \leftarrow \\ \leftarrow \end{array} 45(230) \end{aligned}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat | China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  | 10 $\qquad$ |  |  |
| $\begin{array}{r} \text { (85) } 140 \\ (450) 370 \end{array}$ <br> Forni Rd / Pleasant Valley Rd | Missouri Flat/Pleasant Valley Rd | $\begin{array}{r} \text { (10) } 10 \\ (845) 365 \end{array}$ <br> China Garden Rd/Pleasant Valley |  |
|  | 14 |  |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | (30) 2 |  <br>  <br> Black Rice Rd/Lime Kiln Rd |
|  | 18 | 19 | $\square \underbrace{\text { Legend }}$ |
|  <br> Diamond Springs Pkwy/Project |  <br> Missouri Flat Rd \& Diamond Springs Pkwy |  <br> Diamond Springs Pkwy \& Throwita Way | (XX) PM Peak Hour Volume qR1-1 Stop Sign Signalized Intersection |

TABLE 1
PEAK HOUR INTERSECTION LEVELS OF SERVICE
2027 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2027 |  | 2027 Plus Project |  | 2027 |  | 2027 Plus Project |  |  |
|  |  | LOS | Average <br> Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd / Plaza Dr | Signal | B | 14.7 | B | 14.6 | C | 27.4 | C | 27.7 | N/A |
| 2. Missouri Flat Rd/ WB US 50 ramps | Signal | B | 18.3 | B | 18.7 | B | 18.8 | C | 21.8 | N/A |
| 3. Missouri Flat Rd / EB US 50 ramps | Signal | B | 12.7 | B | 13.0 | C | 24.3 | C | 25.8 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | A | 9.8 | A | 9.7 | B | 18.1 | C | 21.2 | N/A |
| 5. Missouri Flat Rd / Forni Rd | Signal | C | 26.7 | C | 29.5 | D | 35.7 | D | 36.7 | N/A |
| 6. Missouri Flat Rd/ Golden Center Dr | Signal | B | 17.5 | B | 17.4 | C | 31.0 | D | 35.2 | N/A |
| 7. Missouri Flat Rd / China Garden Rd NB Left <br> SB Left <br> EB Right <br> WB Right | EB / WB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 5.9 \\ 14.2 \\ 6.7 \\ 9.0 \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 6.0 \\ 12.6 \\ 10.1 \\ 6.5 \\ \hline \end{gathered}$ | $\begin{aligned} & \diamond \\ & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{C} \end{aligned}$ | $\begin{gathered} \diamond \\ 8.1 \\ 9.9 \\ 17.8 \\ \hline \end{gathered}$ | $\begin{aligned} & \diamond \\ & \text { A } \\ & \text { B } \\ & \text { C } \end{aligned}$ | $\begin{gathered} \diamond \\ 8.4 \\ 10.2 \\ 18.8 \end{gathered}$ | Yes $\dagger$ |
| 8. Pleasant Valley Rd (SR 49) / SR 49 - South | AWS Stop | C | 19.1 | C | 22.4 | D | 26.8 | D | 25.3 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{E} \\ & \mathrm{~A} \end{aligned}$ | $\begin{array}{r} 35.7 \\ 6.3 \end{array}$ | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 51.6 \\ 6.2 \end{gathered}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{array}{r} 13.6 \\ 6.4 \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{B} \\ \mathrm{~A} \\ \hline \end{array}$ | $\begin{array}{r} 12.6 \\ 6.4 \\ \hline \end{array}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | C | 23.9 | C | 28.1 | C | 24.6 | C | 22.7 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd <br> SB <br> EB Left | SB Stop | $\begin{aligned} & \text { B } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & 14.4 \\ & 14.1 \end{aligned}$ | B | $\begin{aligned} & 14.5 \\ & 12.2 \end{aligned}$ | B B | $\begin{aligned} & 11.8 \\ & 10.8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 12.6 \\ 9.9 \end{gathered}$ | No |

$\ddagger$ meets volume portion of warrant in PM peak hour
$\diamond$ no delay reported
$\dagger$ meets volume portion of warrant in AM and PM peak hours
Red indicated threshold exceeded

Ms. Natalie Porter
Memo: Update to Piedmont Oak Estates Traffic Impact Analysis September 27, 2017
Page 7

## TABLE 1 (cont'd)

PEAK HOUR INTERSECTION LEVELS OF SERVICE
2027 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | $\begin{array}{\|c\|} \hline \text { Traffic } \\ \text { Signal } \\ \text { Warranted? } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2027 |  | 2027 Plus Project |  | 2027 |  | 2027 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) | Signal | B | 19.8 | C | 20.0 | C | 20.2 | C | 20.9 | N/A |
| 13. Pleasant Valley Rd / Racquet Way <br> NB <br> SB <br> EB Left <br> WB Left | $\begin{gathered} \text { NB / SB } \\ \text { Stop } \end{gathered}$ | $\begin{gathered} \mathrm{C} \\ \mathrm{~B} \\ \mathrm{~A} \\ \mathrm{~A} \\ \hline \end{gathered}$ | $\begin{gathered} 15.3 \\ 10.5 \\ 7.8 \\ 8.2 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 13.4 \\ 9.8 \\ 6.5 \\ 6.5 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{gathered} 20.2 \\ 7.5 \\ 5.2 \\ 11.0 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{gathered} 22.2 \\ 8.5 \\ 5.1 \\ 11.3 \\ \hline \end{gathered}$ | Yes $\ddagger$ |
| 14. Diamond Road (SR 49) / Truck St <br> NB Left <br> EB | EB Stop | $\begin{aligned} & \text { A } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 4.9 \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 5.7 \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { A } \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 5.7 \end{aligned}$ | No |
| 15. Diamond Road (SR 49) / Bradley Dr EB | EB Stop | A | 2.6 | A | 2.8 | A | 2.8 | A | 3.1 | No |
|  | $\begin{gathered} \text { EB / WB } \\ \text { Stop } \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.0 \\ & 4.2 \\ & 3.2 \\ & 4.5 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.6 \\ & 3.8 \\ & 3.2 \\ & 4.1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.0 \\ & 3.9 \\ & 4.8 \\ & 3.4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.6 \\ & 4.2 \\ & 5.1 \\ & 3.5 \\ & \hline \end{aligned}$ | Yes $\ddagger$ |
| 17. Diamond Road (SR 49) / Diamond Springs Parkway | Signal | A | 6.0 | A | 8.0 | A | 9.3 | B | 11.4 | N/A |
| 18. Diamond Springs Parkway / Missouri Flat Road | Signal | B | 13.1 | B | 12.7 | B | 17.5 | B | 17.4 | N/A |
| 19. Diamond Springs Parkway / Throwita Way | Signal | B | 14.2 | B | 14.7 | B | 14.3 | B | 14.8 | N/A |

$\ddagger$ meets volume portion of warrant in PM peak hour
$\diamond$ no delay reported
$\dagger$ meets volume portion of warrant in AM and PM peak hours
Red indicated threshold exceeded

Page 8

TABLE 2
2027 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue <br> (feet) |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |
| NB left turn | 330 | 195 (2) | 82 | 355 (2) | 179 |
| NB through | 450 | 490 (2) | 100 | 375 (2) | 179 |
| NB right turn | 450 | 345 | 132 | 450 | 191 |
| SB left turn | 110 | 50 | 69 | 50 | 70 |
| EB left+through+right | 120 | 110 (2) | 65 | 415 (2) | 207 |
| WB left +through+right turn | 275 | 295 (2) | 122 | 535 (2) | 241 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |
| NB left turn | 160 | 445 (2) | 169 | 425 (2) | 161 |
| NB through | 360 | 680 (2) | 323 | 810 (2) | 187 |
| SB through | 520 | 495 (2) | 152 | 875 (2) | 268 |
| WB left turn | 410 | 640 (2) | 215 | 660 (2) | 261 |
| WB right turn | 410 | 350 (2) | 130 | 370 (2) | 163 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |
| NB through | 160 | 1,010 (2) | 199 | 995 (2) | 183 |
| NB right turn | 140 | 85 | 74 | 75 | 57 |
| SB left | 160 | 145 (2) | 94 | 325 (2) | 187 |
| SB through | 380 | 900 (2) | 101 | 1,215 (2) | 322 |
| EB left+through+right turn | 540 | 515 (3) | 170 | 860 (3) | 279 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |
| NB left turn | 150 | 15 | 51 | 45 | 183 |
| NB through | 2,300 | 1,025 (2) | 278 | 1,035 (2) | 705 |
| SB through | 140 | 1,250 (2) | 184 | 1,770 (2) | 193 |
| SB right turn | 130 | 45 | 55 | 65 | 65 |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |
| NB left turn | 250 | 55 | 158 | 80 | 174 |
| NB through | 1,000 | 1,000 (2) | 355 | 935 (2) | 361 |
| NB right turn | 160 | 60 | 147 | 25 | 80 |
| SB left turn | 300 | 255 | 334 | 160 | 301 |
| SB through | 2,300 | 765 (2) | 373 | 1,195 (2) | 454 |
| SB right turn | 150 | 255 | 181 | 415 | 234 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |
| NB left turn | 120 | 40 | 98 | 85 | 174 |
| SB left turn | 160 | 80 | 135 | 70 | 155 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |
| SB left turn | 600 | 180 | 123 | 540 | 224 |
| SB right turn | 600 | 170 | 81 | 355 | 104 |
| EB left turn | 160 | 375 (2) | 261 | 260 (2) | 278 |
| WB right turn | 190 | 480 | 157 | 275 | 136 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

TABLE 2 (cont'd)
2027 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue (feet) |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |
| SB left turn | 340 | 110 | 106 | 305 | 223 |
| SB through+right | 340 | 105 | 86 | 160 | 99 |
| NB right turn | 100 | 25 | 54 | 50 | 70 |
| NB left+through | 600 | 115 | 114 | 110 | 136 |
| EB left turn | 200 | 100 | 115 | 105 | 161 |
| WB right turn | 170 | 320 | 252 | 185 | 182 |
| WB left turn | 100 | 20 | 84 | 50 | 101 |
| 17. Diamond Road (SR 49) / Diamond Springs Parkway |  |  |  |  |  |
| NB left | 350 | 160 (2) | 53 | 125 (2) | 56 |
| SB right | 465 | 130 | 57 | 85 | 50 |
| EB left | 995 | 55 | 50 | 65 | 56 |
| EB right | 995 | 125 | 55 | 295 | 101 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |
| NB left | 275 | 920 (2) | 225 | 835 (2) | 213 |
| EB through | 1,600 | 165 (2) | 76 | 295 (2) | 210 |
| WB left | 500 | 40 | 58 | 35 | 51 |
| WB Through | 1,600 | 335 (2) | 97 | 220 (2) | 73 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |
| NB right | 200 | 15 | 28 | 35 | 44 |
| EB left | 200 | 15 | 44 | 25 | 58 |
| EB right | 200 | 15 | 18 | 30 | 26 |
| WB left | 200 | 30 | 65 | 25 | 55 |

Highlighted values indicate queue length in excess of available storage

## $\underline{2027 \text { Plus Project }}$

Trip Generation. The trip generation for this project was revised to account for a reduction in SFR units, from 104 units to 75 units. The revised trip generation is illustrated in Table 3. The revised project will generate 1,192 new daily trips, with 115 new trips in the a.m. peak hour and 182 new trips during the p.m. peak hour.

TABLE 3 TRIP GENERATION

| Land Use | Unit Quantity | Size | Trips Per Unit |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Daily | AM Peak Hour |  |  | PM Peak Hour |  |  |
|  |  |  |  | In | Out | Total | In | Out | Total |
| Single Family Residential (LU 210) | Unit | 75 | 10.47 | 25\% | 75\% | 0.79 | 63\% | 37\% | 1.05 |
| General Office (LU 710) | KSF | 20.0 | 19.32 | 88\% | 12\% | 2.64 | 17\% | 83\% | 5.04 |
| Single Family Residential (LU 210) |  |  | 806 | 16 | 47 | 62 | 51 | 30 | 81 |
| General Office (LU 710) |  |  | 386 | 46 | 6 | 53 | 17 | 84 | 101 |
| Net New Trips |  |  | 1,192 | 62 | 53 | 115 | 68 | 114 | 182 |

KSF - thousand square feet
Notes - no pass-by trip reduction used; numbers may not add up due to rounding

Trip Distribution \& Assignment. No changes were made to the trip distribution and assignment originally identified in the December 2014 traffic impact analysis.

Intersection Levels of Service. Year 2027 plus Project volumes were used to recalculate operating Levels of Service at the study intersections. Figure 2 displays the Project traffic volumes while Figure 3 displays the "2027 Plus Project" traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 1 displays the a.m. and p.m. peak hour Levels of Service under 2027 plus Project conditions. One intersection will operate at LOS F with the proposed project. This is the Pleasant Valley Road (SR 49) / Forni Road intersection which will decline to LOS F. This is not considered significant as the project will add less than 10 trips per hour and less than 100 daily trips to the intersection.

Traffic Signal Warrants. 2027 plus Project traffic volumes at unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals may be needed. One intersection, Pleasant Valley Road (SR 49) at SR 49 - South will meet the peak hour warrant, in both a.m. and p.m. peak hours.

Intersection Queues. Table 4 identifies peak period queues for the Year 2027 plus Project condition. Project trips and the SimTraffic software may change the length of some queues. Those $95^{\text {th }}$ percentile queues with lengths exceeding the available storage have been highlighted. Under 2027 plus Project conditions thirteen locations will exceed the available storage.

The left turn lanes along the Westbound US 50 off-ramps at Missouri Flat Road are projected to have queues of up to 441 feet in the p.m. peak hour. The westbound ramp currently provides for dual left turn lanes of about 410 feet each. The off-ramp extends an additional 1,000 feet with single lanes for right and left turning vehicles prior to reaching US 50. This provides adequate storage for this projected queue.

The southbound left turn lane at the Missouri Flat Road / Golden Center Drive intersection is projected to require storage of about 174 feet. The existing left turn lane is about 160 feet. The left turn bay taper provides about 30 feet of additional storage before a left turning vehicle will block the southbound through lane. This provides the additional storage needed to accommodate the projected turn length and no mitigations are necessary.

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat |  <br> Mother Lode Dr/Missouri Flat |
|  |  |  | 8 $q_{R 1-1}$ |
|  <br> Forni Rd / Missouri Flat Rd |  <br> Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat |  |
|  |  |  |  |
| (0) 0 <br> (3) 2 <br> Forni Rd / Pleasant | (0) 0 <br> (6) 7 <br> Missouri Flat/Pleasant Valley Rd | (6) 7 <br> China Garden Rd/Pleasant Valley |  |
|  | 14 $\begin{gathered} o \\ 0 \frac{0}{0} \\ 0 \sigma^{2} \end{gathered}$ | $15$ $\begin{aligned} & \text { oo } \\ & \text { of } \\ & \text { +f } \end{aligned}$ |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | Diamond Rd / Bradley Dr |  <br>  <br> Black Rice Rd/Lime Kiln Rd |
|  | 18 | 19 | Legend $\square \times X X$ AM Peak Hour Volume |
|  <br>  <br> Diamond Springs Pkwy/Project |  <br> Missouri Flat Rd \& Diamond Springs Pkwy | Diamond Springs Pkwy \& Throwita Way | $\checkmark(X X)$ PM Peak Hour Volume qR1-1 Stop Sign Signalized Intersection |


|  |  |  | 4 <br> ㅇ |
| :---: | :---: | :---: | :---: |
|  <br> Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> ${ }^{\text {dR1-1 }}$ $\begin{aligned} & \longleftarrow 321(297) \\ & \leftarrow 146(232) \end{aligned}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat | China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| (85) 140 <br> (453) 372 <br> Forni Rd / Pleasant Valley Rd |  | (10) 10 <br> (851) 372 <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | 15 $\begin{aligned} & \text { o을 } \\ & \text { 웅 } \\ & \text { oin } \\ & \text { if } \end{aligned}$ | 16 <br>  |
|  <br> Racquet Way/Pleasant Valley Rd | (25) 10 <br> (20) 5 <br> Diamond Rd / Truck St | (30) 2 <br> Diamond Rd / Bradley Dr |  <br> Black Rice Rd/Lime Kiln Rd |
|  <br> Diamond Springs Pkwy/Project | 18 <br> Missouri Flat Rd \& Diamond Springs Pkwy | Diamond Springs Pkwy \& Throwita Way | Legend  <br> CXX AM Peak Hour Volume <br> (XX) PM Peak Hour Volume <br> dR1-1 Stop Sign <br> B Signalized Intersection |

TABLE 4
2027 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | 2027 Plus <br> Project Queue (feet) | VPH |  |  | 2027 PlusProject Queue(feet) |
|  |  | 2027 | Project Only | Total |  | 2027 | Project Only | Total |  |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 330 | 195 (2) | 0 | 195 | 98 | 355 (2) | 0 | 355 | 177 |
| NB through | 450 | 490 (2) | 4 | 494 | 146 | 375 (2) | 11 | 386 | 184 |
| NB right turn | 450 | 345 | 0 | 345 | 146 | 450 | 0 | 450 | 196 |
| SB left turn | 110 | 50 | 0 | 50 | 62 | 50 | 0 | 50 | 75 |
| EB left+through+right | 120 | 110 (2) | 0 | 110 | 70 | 415 (2) | 0 | 415 | 216 |
| WB left +through+right turn | 275 | 295 (2) | 0 | 295 | 118 | 535 (2) | 0 | 535 | 241 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB left turn | 160 | 445 (2) | 11 | 456 | 166 | 425 (2) | 23 | 448 | 166 |
| NB through | 360 | 680 (2) | 4 | 684 | 345 | 810 (2) | 11 | 821 | 224 |
| SB through | 520 | 495 (2) | 5 | 500 | 159 | 875 (2) | 7 | 882 | 272 |
| WB left turn | 410 | 640 (2) | 6 | 646 | 229 | 660 (2) | 6 | 666 | 441 |
| WB right turn | 410 | 350 (2) | 0 | 350 | 130 | 370 (2) | 0 | 370 | 227 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB through | 160 | 1,010 (2) | 15 | 1,025 | 199 | 995 (2) | 34 | 1,029 | 184 |
| NB right turn | 140 | 85 | 0 | 85 | 69 | 75 | 0 | 75 | 53 |
| SB left | 160 | 145 (2) | 0 | 145 | 89 | 325 (2) | 0 | 325 | 194 |
| SB through | 380 | 900 (2) | 11 | 911 | 120 | 1,215 (2) | 13 | 1,228 | 349 |
| EB left+through+right turn | 540 | 515 (3) | 12 | 527 | 158 | 860 (3) | 14 | 874 | 307 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 150 | 15 | 1 | 16 | 54 | 45 | 2 | 47 | 202 |
| NB through | 2,300 | 1,025 (2) | 15 | 1,040 | 258 | 1,035 (2) | 34 | 1,069 | 793 |
| SB through | 140 | 1,250 (2) | 23 | 1,273 | 184 | 1,770 (2) | 27 | 1,797 | 190 |
| SB right turn | 130 | 45 | 0 | 45 | 41 | 65 | 0 | 65 | 66 |

Highlighted values indicate queue length in excess of available storage

TABLE 4 (cont'd)
2027 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\underset{\text { (feet) }}{\text { Capacity }}$ <br> (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{aligned} & 2027 \text { Plus } \\ & \text { Project } \\ & \text { Queue (feet) } \end{aligned}$ | VPH |  |  | 2027 PlusProject Queue(feet) |
|  |  | 2027 | Project Only | Total |  | 2027 | Project Only | Total |  |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |  |  |  |  |
| NB left turn | 250 | 55 | 1 | 56 | 139 | 80 | 1 | 81 | 175 |
| NB through | 1,000 | 1,000 (2) | 21 | 1,021 | 378 | 935 (2) | 46 | 981 | 376 |
| NB right turn | 160 | 60 | 0 | 60 | 146 | 25 | 0 | 25 | 82 |
| SB left turn | 300 | 255 | 0 | 255 | 372 | 160 | 0 | 160 | 286 |
| SB through | 2,300 | 765 (2) | 24 | 789 | 455 | 1,195 (2) | 28 | 1,223 | 452 |
| SB right turn | 150 | 255 | 0 | 255 | 187 | 415 | 0 | 415 | 235 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 120 | 40 | 0 | 40 | 90 | 85 | 0 | 85 | 184 |
| SB left turn | 160 | 80 | 0 | 80 | 132 | 70 | 0 | 70 | 174 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |  |  |  |  |
| SB left turn | 600 | 180 | 0 | 180 | 120 | 540 | 0 | 540 | 223 |
| SB right turn | 600 | 170 | 0 | 170 | 73 | 355 | 0 | 355 | 106 |
| EB left turn | 160 | 375 (2) | 0 | 375 | 276 | 260 (2) | 0 | 260 | 253 |
| WB right turn | 190 | 480 | 0 | 480 | 164 | 275 | 0 | 275 | 115 |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |  |  |  |  |
| SB left turn | 340 | 110 | 7 | 117 | 101 | 305 | 16 | 321 | 222 |
| SB through+right | 340 | 105 | 9 | 114 | 77 | 160 | 15 | 175 | 118 |
| NB right turn | 100 | 25 | 0 | 25 | 57 | 50 | 0 | 50 | 77 |
| NB left+through | 600 | 115 | 3 | 118 | 132 | 110 | 3 | 113 | 126 |
| EB left turn | 200 | 100 | 7 | 107 | 116 | 105 | 6 | 111 | 167 |
| WB right turn | 170 | 320 | 9 | 329 | 256 | 185 | 10 | 195 | 191 |
| WB left turn | 100 | 20 | 0 | 20 | 76 | 50 | 0 | 50 | 109 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

TABLE 4 (cont'd)
2027 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{array}{\|c\|} \hline 2027 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \\ \hline \end{array}$ | VPH |  |  | 2027 PlusProject Queue(feet) |
|  |  | 2027 | Project Only | Total |  | 2027 | Project <br> Only | Total |  |
| 17. Diamond Road (SR 49) / Diamond Springs Parkway |  |  |  |  |  |  |  |  |  |
| NB left | 350 | 160 (2) | 0 | 160 | 66 | 125 (2) | 0 | 125 | 61 |
| SB right | 465 | 130 | 0 | 130 | 61 | 85 | 0 | 85 | 50 |
| EB left | 995 | 55 | 0 | 55 | 58 | 65 | 0 | 65 | 69 |
| EB right | 995 | 125 | 0 | 125 | 51 | 295 | 0 | 295 | 120 |
| WB left | 200 | --- | 16 | 16 | 42 | --- | 31 | 31 | 55 |
| WB through-right | 600 | --- | 37 | 37 | 58 | --- | 83 | 83 | 74 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |  |  |  |  |
| NB left | 275 | 920 (2) | 0 | 920 | 213 | 835 (2) | 0 | 835 | 210 |
| EB through | 1,600 | 165 (2) | 33 | 198 | 88 | 295 (2) | 40 | 335 | 110 |
| WB left | 500 | 40 | 0 | 40 | 55 | 35 | 0 | 35 | 50 |
| WB Through | 1,600 | 335 (2) | 97 | 364 | 106 | 220 (2) |  |  | 86 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |  |  |  |  |
| NB right | 200 | 15 | 0 | 15 | 31 | 35 | 0 | 35 | 47 |
| EB left | 200 | 15 | 0 | 15 | 43 | 25 | 0 | 25 | 61 |
| EB right | 200 | 15 | 0 | 15 | 15 | 30 | 0 | 30 | 34 |
| WB left | 200 | 30 | 0 | 30 | 76 | 25 | 0 | 25 | 61 |

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## 2035 Traffic Conditions

2035 traffic conditions were previously established to analyze the Near-Term scenarios. The County's traffic model includes land uses consistent with the project within the project's Traffic Analysis Zone (TAZ); therefore, the 2035 No Project volumes were developed by subtracting project traffic from the forecasted volumes. Figure 4 presents the Year 2035 projected volumes.

Intersection Levels of Service. The identified Year 2035 volumes were used to project operating Levels of Service at the study intersections. Table 5 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2035 condition. All intersections are projected to operate within the County's LOS thresholds, at LOS E or better.

Traffic Signal Warrants. One unsignalized intersection is projected to have volumes that meet the peak hour signal warrant criteria during either peak period. This is the Pleasant Valley Road / SR 49 - South intersection where the peak hour signal warrant is met in both the a.m. and p.m. peak periods.

Intersection Queues. Table 6 identifies peak period queues for the Year 2035 No Project condition. The $95^{\text {th }}$ percentile queue is projected to be exceeded at thirteen locations.

|  |  |  | 4 <br> ㅇ |
| :---: | :---: | :---: | :---: |
|  <br> Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | (20) 45 |
|  |  |  | 8 <br> $q_{R 1-1}$ $\begin{aligned} & \longleftarrow 354(318) \\ & \leftarrow 149(243) \end{aligned}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  |  |  | 12 |
| (90) 140 <br> (487) 403 <br> Forni Rd / Pleasant Valley Rd | (281) 418 (333) $204 \rightarrow$ Missouri Flat/Pleasant Valley Rd | $10 \text { (10) }$ <br> (803) 364 <br> China Garden Rd/Pleasant Valley |  |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd |  | (25) 2 <br> Diamond Rd / Bradley Dr |  |
|  | 18 | 19 | FXX $\begin{gathered}\text { Legend } \\ \text { Peak Hour Volume }\end{gathered}$ |
|  <br> Diamond Springs Pkwy/Project $\dagger$ |  <br> Missouri Flat Rd \& Diamond Springs Pkwy |  <br> Diamond Springs Pkwy \& Throwita Way | $\checkmark(X X)$ PM Peak Hour Volume dR1-1 Stop Sign Signalized Intersection |

TABLE 5
PEAK HOUR INTERSECTION LEVELS OF SERVICE - 2035 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2035 |  | 2035 Plus Project |  | 2035 |  | 2035 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd/ Plaza Dr | Signal | B | 14.8 | B | 15.0 | C | 26.2 | C | 26.6 | N/A |
| 2. Missouri Flat Rd/ WB US 50 ramps | Signal | B | 18.7 | B | 18.8 | C | 21.0 | C | 21.4 | N/A |
| 3. Missouri Flat Rd/EB US 50 ramps | Signal | B | 13.8 | B | 14.4 | C | 23.5 | C | 24.5 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | A | 9.5 | B | 10.5 | B | 12.5 | B | 17.4 | N/A |
| 5. Missouri Flat Rd/ Forni Rd | Signal | C | 29.5 | C | 33.3 | D | 54.5 | E | 55.7 | N/A |
| 6. Missouri Flat Rd/ Golden Center Dr | Signal | C | 23.4 | C | 23.5 | D | 35.9 | D | 36.0 | N/A |
| 7. Missouri Flat Rd / China Garden Rd <br> NB Left <br> SB Left <br> EB <br> WB | WB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 5.7 \\ 13.2 \\ 9.0 \\ 7.0 \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 9.4 \\ 14.2 \\ 7.2 \\ 9.1 \end{gathered}$ | $\begin{gathered} \diamond \\ \mathrm{A} \\ \mathrm{~B} \\ \mathrm{~B} \end{gathered}$ | $\begin{gathered} \diamond \\ 9.9 \\ 10.6 \\ 12.4 \end{gathered}$ | $\begin{gathered} \diamond \\ \mathrm{A} \\ \mathrm{~B} \\ \mathrm{~B} \\ \hline \end{gathered}$ | 8.6 <br> 10.1 <br> 14.1 | Yes $\ddagger$ |
| 8. Pleasant Valley Rd (SR 49) / SR-49 South | AWS Stop | E | 36.8 | D | 30.8 | E | 47.0 | E | 44.1 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd <br> SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{E} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 43.4 \\ 7.1 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{E} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 48.8 \\ 7.4 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{D} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 25.6 \\ 7.1 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{D} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{array}{r} 27.9 \\ 7.4 \\ \hline \end{array}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | D | 37.1 | D | 42.4 | B | 13.8 | B | 14.0 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~B} \end{aligned}$ | $\begin{aligned} & 13.5 \\ & 13.7 \end{aligned}$ | $\begin{aligned} & \text { B } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & 12.6 \\ & 14.8 \end{aligned}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 10.2 \\ 7.1 \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 8.9 \\ & 9.8 \end{aligned}$ | No |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) | Signal | B | 15.7 | B | 17.3 | C | 21.4 | C | 22.0 | N/A |

$\pm$ meets volume portion of warrant in PM peak hour
$\diamond$ no delay reported
$\dagger$ meets volume portion of warrant in AM and PM peak hours
Red indicated threshold exceeded

## TABLE 5 (cont'd)

PEAK HOUR INTERSECTION LEVELS OF SERVICE
2035 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2035 |  | 2035 Plus Project |  | 2035 |  | 2035 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 13. Pleasant Valley Rd / Racquet Way <br> NB <br> SB <br> EB Left <br> WB Left | $\begin{aligned} & \text { NB / SB } \\ & \text { Stop } \end{aligned}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 14.7 \\ 12.1 \\ 7.0 \\ 8.3 \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 17.6 \\ 11.4 \\ 7.1 \\ 9.3 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { C } \\ & \text { B } \\ & \text { A } \\ & \text { B } \end{aligned}$ | $\begin{gathered} 24.6 \\ 10.8 \\ 5.1 \\ 11.5 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~B} \\ & \mathrm{~A} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{gathered} 22.7 \\ 10.3 \\ 5.2 \\ 11.4 \\ \hline \end{gathered}$ | Yes $\ddagger$ |
|  | EB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.2 \\ & 5.4 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.2 \\ & 7.7 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 7.8 \\ & \hline \end{aligned}$ | No |
| 15. Diamond Road (SR 49) / Bradley Dr EB right | EB Stop | A | 3.3 | A | 4.7 | A | 3.0 | A | 3.7 | No |
| 16. Diamond Rd (SR 49) / Lime Kiln Rd - Black Rice Ln <br> NB Left <br> SB Left <br> EB right <br> WB right | $\mathrm{EB} / \mathrm{WB}$ Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 4.4 \\ & 6.0 \\ & 3.3 \\ & 4.9 \\ & \hline \end{aligned}$ | A <br> A <br> A <br> A | $\begin{aligned} & 4.7 \\ & 6.7 \\ & 3.5 \\ & 5.4 \end{aligned}$ | A <br> A <br> A <br> A | $\begin{aligned} & 6.8 \\ & 5.0 \\ & 4.3 \\ & 4.2 \end{aligned}$ | A <br> A <br> A <br> A | $\begin{aligned} & 8.5 \\ & 5.3 \\ & 5.7 \\ & 4.8 \\ & \hline \end{aligned}$ | No |
| 17. Diamond Rd (SR 49) / Diamond Springs Pkwy Project Access | Signal | D | 38.6 | D | 44.2 | C | 27.6 | C | 34.2 | N/A |
| 18. Missouri Flat Road / Diamond Springs Pkwy | Signal | B | 15.8 | B | 16.2 | B | 18.8 | B | 19.4 | N/A |
| 19. Diamond Springs Pkwy / Throwita Way | Signal | B | 17.2 | B | 14.7 | B | 17.2 | B | 16.9 | N/A |

$\ddagger$ meets volume portion of warrant in PM peak hour
$\diamond$ no delay reported

[^1]Page 21

TABLE 6
2035 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue <br> (feet) |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |
| NB left turn | 330 | 220 (2) | 104 | 375 (2) | 174 |
| NB through | 450 | 531 (2) | 141 | 414 (2) | 186 |
| NB right turn | 450 | 345 | 138 | 455 | 195 |
| SB left turn | 110 | 55 | 67 | 55 | 76 |
| EB left+through+right | 120 | 125 (2) | 71 | 430 (2) | 203 |
| WB left +through+right turn | 275 | 300 (2) | 118 | 545 (2) | 222 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |
| NB left turn | 160 | 479 (2) | 168 | 452 (2) | 164 |
| NB through | 360 | 736 (2) | 400 | 859 (2) | 264 |
| SB through | 520 | 530 (2) | 156 | 913 (2) | 271 |
| WB left turn | 410 | 544 (2) | 185 | 709 (2) | 347 |
| WB right turn | 410 | 360 (2) | 152 | 390 (2) | 217 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |
| NB through | 160 | 1,080 (2) | 195 | 1,051 (2) | 187 |
| NB right turn | 140 | 90 | 35 | 75 | 15 |
| SB left | 160 | 150 (2) | 94 | 325 (2) | 187 |
| SB through | 380 | 924 (2) | 99 | 1,297 (2) | 326 |
| EB left+through+right turn | 540 | 578 (3) | 177 | 911 (3) | 293 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |
| NB left turn | 150 | 9 | 44 | 38 | 147 |
| NB through | 2,300 | 1,155 (2) | 344 | 1,171 (2) | 490 |
| SB through | 140 | 1,347 (2) | 191 | 1,933 (2) | 204 |
| SB right turn | 130 | 15 | 29 | 20 | 41 |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |
| NB left turn | 250 | 64 | 184 | 100 | 230 |
| NB through | 1,000 | 1,094 (2) | 403 | 999 (2) | 404 |
| NB right turn | 160 | 60 | 143 | 25 | 99 |
| SB left turn | 300 | 235 | 353 | 155 | 306 |
| SB through | 2,300 | 841 (2) | 402 | 1,307 (2) | 462 |
| SB right turn | 150 | 295 | 208 | 465 | 228 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |
| NB left turn | 120 | 60 | 149 | 95 | 203 |
| SB left turn | 160 | 95 | 176 | 75 | 194 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |
| SB left turn | 600 | 175 | 117 | 470 | 212 |
| SB right turn | 600 | 184 | 82 | 404 | 123 |
| EB left turn | 160 | 418 (2) | 291 | 281 (2) | 135 |
| WB right turn | 190 | 435 | 127 | 230 | 106 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

TABLE 6 (cont'd)
2035 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue <br> (feet) | VPH | Queue <br> (feet) |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |
| SB left turn | 340 | 153 | 132 | 399 | 268 |
| SB through+right | 340 | 82 | 69 | 146 | 89 |
| NB right turn | 100 | 35 | 58 | 60 | 89 |
| NB left+through | 600 | 107 | 118 | 107 | 130 |
| EB left turn | 200 | 89 | 99 | 93 | 154 |
| WB right turn | 170 | 446 | 228 | 250 | 207 |
| WB left turn | 100 | 20 | 74 | 65 | 127 |
| 17. Diamond Rd (SR 49) / Diamond Springs Pkwy |  |  |  |  |  |
| NB left | 350 | 540 (2) | 236 | 240 (2) | 144 |
| SB right | 465 | 155 | 94 | 95 | 55 |
| EB left | 995 | 90 | 86 | 155 | 133 |
| EB right | 995 | 100 | 66 | 520 | 339 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |
| NB left | 275 | 835 (2) | 233 | 820 (2) | 234 |
| EB through | 1,600 | 202 (2) | 98 | 530 (2) | 172 |
| WB left | 500 | 74 | 93 | 54 | 72 |
| WB Through | 1,600 | 571 (2) | 163 | 284 (2) | 95 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |
| NB right | 200 | 30 | 45 | 60 | 51 |
| EB left | 200 | 30 | 72 | 45 | 85 |
| EB right | 200 | 30 | 25 | 50 | 32 |
| WB left | 200 | 55 | 98 | 45 | 85 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

## 2035 Plus Project

Intersection Levels of Service. Year 2035 plus Project volumes were used to recalculate operating Levels of Service at the study intersections. Figure 5 displays the 2035 Plus Project traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 5 displays the a.m. and p.m. peak hour Levels of Service. All intersections are projected to continue to operate within accepted County LOS thresholds. This is the Pleasant Valley Road (SR 49) / Forni Road intersection which will decline to LOS F. This is not considered significant as the project will add less than 10 trips per hour and less than 100 daily trips to the intersection.

Traffic Signal Warrants. 2035 plus Project traffic volumes at unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals may be needed. One intersection, Pleasant Valley Road (SR 49) at SR 49 - South will continue to meet the peak hour warrant, in both a.m. and p.m. peak hours.

Intersection Queues. Table 7 identifies peak period queues for the Year 2035 plus Project condition. Those $95^{\text {th }}$ percentile queues with lengths exceeding the available storage have been highlighted. Under 2035 plus Project conditions the same thirteen locations as the 2035 No Project scenario will exceed the available storage.

|  |  |  | 4 |
| :---: | :---: | :---: | :---: |
|  <br> Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> dR1-1 $\begin{aligned} & \longleftarrow 355(320) \\ & \leftarrow 150(245) \end{aligned}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| $\begin{array}{r} (90) \\ (490) \\ 405 \end{array} \xrightarrow{\boldsymbol{A}}$ <br> Forni Rd / Pleasant Valley Rd | (285) 420 (335) $210 \rightarrow$ Missouri Flat/Pleasant Valley Rd | $\begin{array}{r} \text { (10) } 10 \\ (805) 370 \end{array}$ <br> China Garden Rd/Pleasant Valley |  |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd |  | (25) 2 <br> Diamond Rd / Bradley Dr | $\text { (15) } 65 \text { ק }$ Black Rice Rd/Lime Kiln Rd |
|  <br> Diamond Springs Pkwy/Projec $\dagger$ |  <br> Missouri Flat Rd \& Diamond Springs Pkwy | Diamond Springs Pkwy \& Throwita Way | Legend  <br> XX AM Peak Hour Volume <br> (XX) PM Peak Hour Volume <br> dR1-1 Stop Sign <br> B Signalized Intersection <br> 8  |

TABLE 7
2035 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \end{gathered}$ | VPH |  |  | 2035 PlusProject Queue(feet) |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 330 | 220 (2) | 0 | 220 | 108 | 375 (2) | 0 | 375 | 173 |
| NB through | 450 | 531 (2) | 4 | 535 | 147 | 414 (2) | 11 | 425 | 180 |
| NB right turn | 450 | 345 | 0 | 345 | 138 | 455 | 0 | 455 | 198 |
| SB left turn | 110 | 55 | 0 | 55 | 62 | 55 | 0 | 55 | 77 |
| EB left+through+right | 120 | 125 (2) | 0 | 125 | 68 | 430 (2) | 0 | 430 | 197 |
| WB left + through+right turn | 275 | 300 (2) | 0 | 300 | 135 | 545 (2) | 0 | 545 | 246 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB left turn | 160 | 479 (2) | 11 | 490 | 166 | 452 (2) | 23 | 475 | 164 |
| NB through | 360 | 736 (2) | 4 | 740 | 405 | 859 (2) | 11 | 870 | 231 |
| SB through | 520 | 530 (2) | 5 | 535 | 157 | 913 (2) | 7 | 920 | 279 |
| WB left turn | 410 | 544 (2) | 6 | 550 | 192 | 709 (2) | 6 | 715 | 316 |
| WB right turn | 410 | 360 (2) | 0 | 360 | 147 | 390 (2) | 0 | 390 | 183 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB through | 160 | 1,080 (2) | 15 | 1,095 | 195 | 1,051 (2) | 34 | 1,085 | 186 |
| NB right turn | 140 | 90 | 0 | 90 | 42 | 75 | 0 | 75 | 15 |
| SB left | 160 | 150 (2) | 0 | 150 | 103 | 325 (2) | 0 | 325 | 190 |
| SB through | 380 | 924 (2) | 11 | 935 | 125 | 1,297 (2) | 13 | 1,310 | 365 |
| EB left+through+right turn | 540 | 578 (3) | 12 | 590 | 184 | 911 (3) | 14 | 925 | 278 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 150 | 9 | 1 | 10 | 59 | 38 | 2 | 40 | 149 |
| NB through | 2,300 | 1,155 (2) | 15 | 1,170 | 363 | 1,171 (2) | 34 | 1,205 | 851 |
| SB through | 140 | 1,347 (2) | 23 | 1,370 | 194 | 1,933 (2) | 27 | 1,960 | 204 |
| SB right turn | 130 | 15 | 0 | 15 | 32 | 20 | 0 | 20 | 20 |

Highlighted values indicate queue length in excess of available storage

TABLE 7 (cont'd)
2027 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \end{gathered}$ | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \end{gathered}$ | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project Queue } \\ \text { (feet) } \end{gathered}$ |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |  |  |  |  |
| NB left turn | 250 | 64 | 1 | 65 | 213 | 100 | 1 | 100 | 245 |
| NB through | 1,000 | 1,094 (2) | 21 | 1,115 | 439 | 999 (2) | 46 | 1,045 | 407 |
| NB right turn | 160 | 60 | 0 | 60 | 152 | 25 | 0 | 25 | 97 |
| SB left turn | 300 | 235 | 0 | 235 | 374 | 155 | 0 | 155 | 312 |
| SB through | 2,300 | 841 (2) | 24 | 865 | 459 | 1,307 (2) | 28 | 1,335 | 462 |
| SB right turn | 150 | 295 | 0 | 295 | 217 | 465 | 0 | 465 | 232 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 120 | 60 | 0 | 60 | 148 | 95 | 0 | 95 | 197 |
| SB left turn | 160 | 95 | 0 | 95 | 183 | 75 | 0 | 75 | 186 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |  |  |  |  |
| SB left turn | 600 | 175 | 0 | 175 | 125 | 470 | 0 | 470 | 212 |
| SB right turn | 600 | 184 | 0 | 185 | 86 | 404 | 0 | 410 | 134 |
| EB left turn | 160 | 418 (2) | 0 | 420 | 285 | 281 (2) | 0 | 285 | 122 |
| WB right turn | 190 | 435 | 0 | 435 | 161 | 230 | 0 | 230 | 118 |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |  |  |  |  |
| SB left turn | 340 | 153 | 7 | 160 | 141 | 399 | 16 | 415 | 292 |
| SB through+right | 340 | 82 | 9 | 90 | 74 | 146 | 15 | 155 | 127 |
| NB right turn | 100 | 35 | 0 | 35 | 66 | 60 | 0 | 60 | 80 |
| NB left+through | 600 | 107 | 3 | 110 | 119 | 107 | 3 | 110 | 135 |
| EB left turn | 200 | 89 | 7 | 95 | 114 | 93 | 6 | 95 | 152 |
| WB right turn | 170 | 446 | 9 | 455 | 229 | 250 | 10 | 260 | 210 |
| WB left turn | 100 | 20 | 0 | 20 | 67 | 65 | 0 | 65 | 120 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

## TABLE 7 (cont'd)

2027 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} \hline 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \\ \hline \end{gathered}$ | VPH |  |  | $\qquad$ |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 17. Diamond Road (SR 49) / Diamond Springs Parkway |  |  |  |  |  |  |  |  |  |
| NB left | 350 | 540 (2) | 0 | 540 | 261 | 240 (2) | 0 | 240 | 190 |
| SB right | 465 | 155 | 0 | 155 | 99 | 95 | 0 | 95 | 58 |
| EB left | 995 | 90 | 0 | 55 | 118 | 155 | 0 | 155 | 171 |
| EB right | 995 | 100 | 0 | 100 | 71 | 520 | 0 | 520 | 364 |
| WB left | 200 | --- | 15 | 15 | 48 | --- | 25 | 25 | 87 |
| WB through-right | 600 | --- | 38 | 38 | 75 | --- | 88 | 88 | 121 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |  |  |  |  |
| NB left | 275 | 835 (2) | 0 | 835 | 248 | 820 (2) | 0 | 820 | 214 |
| EB through | 1,600 | 202 (2) | 33 | 235 | 111 | 530 (2) | 40 | 570 | 174 |
| WB left | 500 | 74 | 0 | 40 | 94 | 54 | 0 | 60 | 87 |
| WB Through | 1,600 | 571 (2) | 97 | 600 | 183 | 284 (2) |  | 350 | 123 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |  |  |  |  |
| NB right | 200 | 30 | 0 | 30 | 50 | 60 | 0 | 60 | 53 |
| EB left | 200 | 30 | 0 | 30 | 65 | 45 | 0 | 45 | 84 |
| EB right | 200 | 30 | 0 | 30 | 24 | 50 | 0 | 50 | 54 |
| WB left | 200 | 55 | 0 | 55 | 83 | 45 | 0 | 45 | 80 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

## Conclusions

The analysis of 2027 and 2035 conditions indicates that the project will not create any significant impacts requiring mitigations.

2027 plus Project: Under 2027 plus Project conditions the Pleasant Valley Road (SR 49) / Forni Road intersection will operate with the southbound approach at LOS F; however, this is not considered a significant impact as the project will not generate more than 10 peak hour trips nor more than 100 daily trips, nor will the peak hour traffic signal warrant be met. Queues at thirteen locations will exceed available turn pockets. A queue is considered significant if the queue under plus project conditions will extend into the adjacent through lane. If a queue under No Project conditions already extends beyond the available storage the additional queue generated under Plus Project conditions is not considered significant. For 2027 plus Project the westbound left turn queue along the westbound off-ramp at Missouri Flat Road will extend beyond the dual left turn lanes. However, these lanes are fed by a dedicated left turn lane for vehicles existing US 50. This provides additional left turn queueing, not requiring any mitigation. The queue in the southbound left turn lane at the Missouri Flat Road / Golden Center Drive intersection will exceed the marked left turn bay by $14{ }^{\prime}$. The turn lane taper provides for about an additional 30' for vehicles to queue before blocking the adjacent through lane. Therefore, this is not considered significant.

2035 plus Project: Under 2035 plus Project conditions all intersections will operate at acceptable levels of service. Thirteen locations will exceed available turn pockets. These thirteen locations are identical to the locations under 2035 No Project conditions. Therefore, there are no significant impacts with regard to queuing.

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 9.5 | 23.3 | 12.9 | 14.4 | 14.7 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 22.9 | 16.9 | 13.5 | 18.3 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 22.6 | 11.1 | 9.6 | 12.7 |

## 4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.6 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 51.9 | 10.0 | 5.7 | 9.8 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 3.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| Total Del/Veh (s) | 38.7 | 16.5 | 26.1 | 26.3 | 26.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 19.6 | 9.9 | 14.7 | 23.2 | 17.5 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 6.7 | 9.0 | 4.1 | 2.6 | 3.7 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 0.0 | 3.3 | 1.3 |
| Total Del/Veh (s) | 12.7 | 9.5 | 33.0 | 19.1 |

## Existing Conditions

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 4.1 | 2.8 | 35.7 | 8.2 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 52.3 | 13.3 | 6.8 | 23.9 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.4 | 0.0 | 0.3 |
| Total Del/Veh (s) | 3.4 | 4.6 | 14.4 | 4.3 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.3 | 1.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 18.3 | 20.0 | 23.8 | 19.2 | 19.8 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.9 | 0.1 | 0.1 | 0.6 |
| Total Del/Veh (s) | 1.7 | 5.4 | 15.3 | 10.5 | 4.8 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 4.9 | 0.8 | 0.6 | 0.8 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 2.6 | 0.8 | 0.4 | 0.7 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.2 | 4.5 | 2.0 | 1.5 | 2.1 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 6.6 | 5.7 | 6.1 | 6.0 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.0 | 0.0 | 1.3 | 0.2 |
| Total Del/Veh $(\mathrm{s})$ | 13.9 | 14.8 | 11.5 | 21.8 | 13.1 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 1.0 | 0.1 | 0.2 |
| Total Del/Veh (s) | 11.0 | 7.9 | 43.6 | 41.1 | 14.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.4 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 277.8 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 14.7 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 29.1 | 11.4 | 30.1 | 8.1 | 16.4 | 3.4 | 18.3 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.1 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 28.4 | 21.0 | 11.5 | 4.1 | 35.7 | 5.8 | 12.7 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.6 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 68.5 | 11.9 | 85.2 | 11.1 | 4.4 | 5.9 | 2.1 | 9.8 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 3.5 | 0.8 | 3.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 0.9 | 0.0 | 0.0 |
| Total Del/Veh (s) | 44.4 | 34.1 | 4.9 | 47.6 | 24.4 | 1.9 | 55.8 | 25.5 | 9.1 | 85.0 | 15.5 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.5 |
| Total Del/Veh (s) | 26.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 35.6 | 30.3 | 13.0 | 31.5 | 1.4 | 18.1 | 40.4 | 14.0 | 11.6 | 48.4 | 21.0 |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 17.5 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 6.7 | 0.1 | 9.0 | 5.9 | 4.2 | 2.0 | 14.2 | 1.1 | 0.0 | 3.7 |

## 8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 0.3 | 0.1 | 0.0 | 3.1 | 3.5 | 1.3 |
| Total Del/Veh (s) | 13.6 | 10.4 | 9.1 | 9.7 | 33.3 | 32.8 | 19.1 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 |
| Total Del/Veh (s) | 6.3 | 3.2 | 2.9 | 2.2 | 45.8 | 30.8 | 8.2 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 71.1 | 24.8 | 18.9 | 8.6 | 12.7 | 0.9 | 4.1 | 23.9 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.4 | 0.5 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh $(\mathrm{s})$ | 14.1 | 3.2 | 4.6 | 3.9 | 21.8 | 12.2 | 4.3 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 19.8 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | NBL | NBR | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 1.2 | 0.9 | 0.1 | 0.1 | 0.1 | 0.6 |
| Total Del/Veh (s) | 7.8 | 1.3 | 0.7 | 8.2 | 5.4 | 20.7 | 5.3 | 10.5 | 4.8 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 5.8 | 3.2 | 2.9 | 0.5 | 0.6 | 0.3 | 0.8 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 2.6 | 0.8 | 0.4 | 0.2 | 0.7 |

## 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.2 | 4.5 | 4.0 | 2.0 | 2.1 | 4.2 | 1.4 | 1.1 | 2.1 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 13.2 | 0.6 | 4.2 | 9.8 | 3.4 | 9.7 | 3.1 | 6.0 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 13.1 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Tenied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.1 | 0.2 | 4.2 | 0.1 | 0.1 |
| Total Del/Veh (s) | 59.5 | 6.8 | 4.5 | 56.4 | 3.7 | 1.8 | 53.0 | 55.0 | 4.2 | 51.3 | 42.8 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 14.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied Del/Veh (s) | 1.4 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 277.8 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 |
| Total DelVeh (s) | 19.6 | 37.3 | 26.1 | 26.0 | 27.4 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.1 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 26.6 | 12.8 | 18.4 | 18.8 |

3: Missouri Flat Road \& EB Ramps Performance by approach

|  | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Approach | 1.2 | 0.0 | 0.0 | 0.3 |
| Denied Del/Veh (s) | 31.7 | 19.4 | 23.7 | 24.3 |

4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.9 | 1.1 | 0.0 | 0.6 |
| Total Del/Veh (s) | 48.5 | 29.3 | 6.1 | 18.1 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 3.5 | 0.0 | 0.2 | 0.0 | 0.7 |
| Total DelVeh (s) | 82.0 | 13.3 | 27.2 | 26.5 | 35.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 1.5 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 34.0 | 43.1 | 23.9 | 34.3 | 31.0 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 17.8 | 9.9 | 3.2 | 1.8 | 3.0 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 8.0 | 0.1 | 0.3 | 3.4 |
| Total Del/Veh (s) | 51.7 | 8.5 | 8.2 | 26.8 |

## Existing Conditions

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh (s) | 3.4 | 2.7 | 13.6 | 4.7 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 0.0 | 0.1 | 0.1 |
| Total Del/Veh (s) | 55.0 | 14.8 | 10.3 | 24.6 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.7 | 3.9 | 11.8 | 4.5 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 1.4 | 0.0 | 0.1 |
| Total Del/Veh (s) | 19.8 | 18.5 | 26.2 | 21.3 | 20.2 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.4 | 0.2 | 0.2 | 0.2 |
| Total Del/Veh (s) | 2.4 | 4.0 | 20.2 | 7.5 | 4.0 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh (s) | 5.7 | 0.8 | 0.6 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 2.8 | 1.1 | 0.4 | 0.9 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| Total Del/Veh (s) | 4.8 | 3.4 | 2.3 | 2.1 | 2.4 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 8.4 | 9.8 | 9.7 | 9.3 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 21.5 | 14.1 | 12.0 | 22.1 | 17.5 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 1.7 | 0.1 | 0.2 |
| Total Del/Veh (s) | 10.3 | 8.7 | 32.5 | 45.3 | 14.3 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.6 |
| Total $\operatorname{Del} /$ Veh (s) | 739.7 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 33.5 | 33.3 | 16.5 | 38.9 | 39.7 | 27.4 | 48.5 | 24.1 | 9.8 | 42.1 | 24.6 | 11.6 |

## 1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 27.4 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 33.2 | 14.9 | 19.6 | 9.3 | 21.6 | 3.8 | 18.8 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.6 | 1.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 |
| Total Del/Veh (s) | 26.2 | 33.7 | 20.3 | 3.3 | 48.1 | 17.0 | 24.3 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh (s) | 0.4 | 4.0 | 1.3 | 1.1 | 1.2 | 0.0 | 0.0 | 0.6 |
| Total Del/Veh (s) | 68.8 | 18.9 | 103.6 | 41.3 | 4.0 | 6.2 | 2.2 | 18.1 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Tonied Del/Veh (s) | 3.6 | 1.8 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 |
|  | 91.3 | 69.2 | 31.4 | 59.4 | 34.4 | 1.8 | 64.4 | 24.5 | 8.6 | 64.2 | 24.9 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.7 |
| Total Del/Veh (s) | 35.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.4 | 0.4 | 0.2 | 1.2 | 1.8 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 47.9 | 50.1 | 27.4 | 47.0 | 47.4 | 34.6 | 90.9 | 18.3 | 15.6 | 78.5 | 32.1 |
| 8.1 |  |  |  |  |  |  |  |  |  |  |  |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 31.0 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 17.8 | 0.2 | 10.0 | 3.2 | 1.3 | 8.1 | 1.5 | 3.0 |

8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 8.2 | 7.6 | 0.1 | 0.0 | 0.3 | 0.3 | 3.4 |
| Total Del/Veh (s) | 52.8 | 49.9 | 9.5 | 7.8 | 9.4 | 7.3 | 26.8 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 6.4 | 2.8 | 2.7 | 2.5 | 25.2 | 11.8 | 4.7 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.4 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 89.0 | 30.4 | 22.7 | 6.8 | 15.4 | 1.8 | 3.9 | 24.6 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Total Del/Veh (s) | 10.8 | 4.6 | 3.9 | 3.7 | 19.8 | 6.2 | 4.5 |  |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.2 | 0.4 | 0.3 | 3.8 | 0.0 | 0.0 |
| Total Del/Veh (s) | 36.3 | 18.3 | 10.9 | 39.2 | 21.6 | 6.6 | 35.3 | 34.5 | 6.5 | 26.3 | 16.1 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 20.2 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 |
| Total Del/Veh (s) | 5.2 | 2.1 | 1.4 | 11.0 | 3.6 | 3.2 | 31.1 | 13.9 | 21.4 | 6.8 | 4.0 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 |
| Total Del/Veh (s) | 7.6 | 3.5 | 3.1 | 0.7 | 0.6 | 0.6 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 2.8 | 1.1 | 0.4 | 0.2 | 0.9 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.8 | 3.4 | 6.0 | 2.2 | 2.0 | 3.9 | 2.0 | 1.5 | 2.4 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 15.8 | 6.9 | 14.2 | 7.6 | 12.1 | 2.7 | 9.3 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Senied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 0.1 |
| Total Del/Veh (s) | 32.4 | 18.2 | 22.3 | 23.6 | 12.7 | 4.7 | 12.8 | 8.5 | 2.6 | 24.1 | 30.8 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 17.5 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Tonied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.3 | 0.2 | 4.0 | 0.1 | 0.1 |
| Total Del/Veh (s) | 59.3 | 7.2 | 5.6 | 60.9 | 3.8 | 1.6 | 49.9 | 49.6 | 5.2 | 51.2 | 47.4 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 14.3 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.6 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 739.7 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 9.5 | 23.9 | 12.7 | 14.4 | 14.6 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.1 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 23.5 | 17.3 | 13.6 | 18.7 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 22.4 | 11.4 | 10.2 | 13.0 |

## 4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.5 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 52.7 | 10.0 | 5.9 | 9.7 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 3.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| Total Del/Veh (s) | 39.5 | 16.8 | 27.3 | 31.5 | 29.5 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 16.7 | 11.4 | 15.3 | 22.0 | 17.4 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 6.5 | 10.1 | 3.8 | 2.5 | 3.6 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.0 | 2.8 | 1.1 |
| Total Del/Veh (s) | 18.2 | 10.3 | 37.6 | 22.4 |

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Del/Veh (s) | 4.0 | 2.8 | 51.6 | 10.0 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 64.9 | 13.8 | 7.0 | 28.1 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.4 | 0.0 | 0.3 |
| Total Del/Veh (s) | 3.3 | 4.6 | 14.5 | 4.3 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.3 | 0.9 | 0.0 | 0.3 |
| Total Del/Veh (s) | 18.6 | 20.0 | 25.6 | 18.7 | 20.0 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.8 | 0.1 | 0.1 | 0.5 |
| Total Del/Veh (s) | 1.5 | 5.4 | 13.4 | 9.8 | 4.8 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh (s) | 5.1 | 0.8 | 0.5 | 0.8 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 2.8 | 1.0 | 0.4 | 0.8 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.2 | 4.1 | 2.0 | 1.6 | 2.1 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 8.6 | 13.6 | 7.4 | 7.3 | 8.0 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.0 | 0.0 | 1.1 | 0.2 |
| Total Del/Veh (s) | 13.5 | 14.4 | 11.2 | 19.6 | 12.7 |

19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 1.1 | 0.1 | 0.2 |
| Total Del/Veh (s) | 11.8 | 8.8 | 42.3 | 45.3 | 14.7 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.3 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 306.0 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 25.3 | 30.1 | 6.9 | 26.3 | 25.8 | 13.1 | 26.8 | 12.0 | 5.8 | 32.7 | 12.2 | 3.9 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 14.6 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 29.8 | 11.3 | 30.8 | 8.1 | 16.5 | 3.5 | 18.7 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 28.2 | 20.7 | 11.8 | 3.8 | 35.0 | 6.7 | 13.0 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.6 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 68.1 | 11.7 | 92.2 | 10.9 | 4.5 | 6.0 | 2.0 | 9.7 |

5: Missouri Flat Road \& Forni Road Performance by movement

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| Senied Del/Veh (s) | 3.6 | 0.9 | 3.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 | 1.1 | 0.0 | 0.0 |
| Total Del/Veh (s) | 44.2 | 40.2 | 5.2 | 50.5 | 24.6 | 1.9 | 54.6 | 26.9 | 9.4 | 109.3 | 15.6 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.5 |
| Total Del/Veh (s) | 29.5 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 33.0 | 32.6 | 10.3 | 33.0 | 1.5 | 19.2 | 41.6 | 14.6 | 12.9 | 51.3 | 19.4 |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 17.4 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 6.5 | 0.2 | 10.3 | 6.0 | 3.9 | 1.8 | 12.6 | 1.1 | 0.1 | 3.6 |

## 8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.4 | 0.1 | 0.0 | 2.7 | 2.9 | 1.1 |
| Total DelVeh (s) | 18.7 | 16.7 | 9.7 | 10.5 | 38.2 | 37.0 | 22.4 |

## 9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 |
| Total Del/Veh (s) | 6.2 | 3.2 | 2.8 | 2.6 | 70.2 | 43.4 | 10.0 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 84.6 | 33.2 | 19.5 | 8.8 | 13.2 | 0.9 | 4.0 | 28.1 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 12.2 | 3.1 | 4.6 | 3.8 | 19.2 | 11.0 | 4.3 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.6 | 0.3 | 0.5 | 0.3 | 0.2 | 3.9 | 0.0 | 0.0 |
| Total Del/Veh (s) | 30.1 | 14.6 | 5.3 | 38.4 | 23.4 | 12.4 | 28.1 | 32.0 | 5.6 | 24.0 | 20.7 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.3 |
| Total Del/Veh (s) | 20.0 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | NBL | NBR | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.0 | 0.9 | 0.8 | 0.1 | 0.1 | 0.1 | 0.5 |
| Total Del/Veh $(\mathrm{s})$ | 6.5 | 1.2 | 0.7 | 6.5 | 5.4 | 17.4 | 5.3 | 9.8 | 4.8 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 | 0.1 |
| Total Del/Veh (s) | 6.0 | 3.3 | 2.9 | 0.5 | 0.5 | 0.4 | 0.8 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 2.8 | 1.0 | 0.5 | 0.2 | 0.8 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.2 | 4.1 | 3.6 | 2.0 | 2.1 | 3.8 | 1.4 | 1.1 | 2.1 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 17.4 | 10.1 | 4.3 | 14.1 | 15.3 | 6.1 | 12.8 | 4.5 | 2.5 | 10.8 | 11.7 | 3.5 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | All |
| :--- | :--- |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 8.0 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 12.7 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Senied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.1 | 0.2 | 0.2 | 4.1 | 0.1 | 0.1 |
| Total Del/Veh (s) | 62.7 | 8.4 | 4.3 | 61.3 | 4.2 | 2.2 | 54.7 | 50.2 | 4.6 | 54.1 | 50.5 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 14.7 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 1.3 |
| Total $\operatorname{Del} / \mathrm{Veh}(\mathrm{s})$ | 306.0 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 20.2 | 37.7 | 26.1 | 26.8 | 27.7 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.1 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 34.6 | 13.7 | 18.8 | 21.8 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 34.2 | 19.5 | 25.5 | 25.8 |

4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.9 | 1.9 | 0.0 | 0.9 |
| Total Del/Veh (s) | 51.3 | 34.9 | 6.8 | 21.2 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 4.2 | 0.0 | 0.1 | 0.0 | 0.8 |
| Total Del/Veh (s) | 93.6 | 12.3 | 24.4 | 26.4 | 36.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.7 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 36.2 | 41.6 | 25.2 | 42.5 | 35.2 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 18.8 | 10.2 | 3.3 | 1.8 | 3.1 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 4.9 | 0.0 | 0.3 | 2.1 |
| Total Del/Veh (s) | 48.8 | 8.3 | 8.3 | 25.3 |

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.2 | 0.1 |
| Total Del/Veh (s) | 3.4 | 2.6 | 12.6 | 4.5 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Del/Veh (s) | 47.9 | 14.7 | 10.4 | 22.7 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.5 | 3.8 | 12.6 | 4.3 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.2 | 1.4 | 0.0 | 0.2 |
| Total Del/Veh (s) | 20.6 | 19.6 | 25.2 | 21.4 | 20.9 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.4 | 0.4 | 0.1 | 0.2 |
| Total Del/Veh (s) | 2.3 | 4.0 | 22.2 | 8.5 | 4.1 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.3 | 0.1 |
| Total Del/Veh (s) | 5.7 | 0.7 | 0.7 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.1 | 1.2 | 0.4 | 0.9 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 5.1 | 3.5 | 2.3 | 2.1 | 2.4 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.1 | 1.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 10.0 | 16.5 | 11.2 | 11.5 | 11.4 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 21.6 | 14.2 | 11.8 | 20.5 | 17.4 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 1.8 | 0.1 | 0.2 |
| Total Del/Veh (s) | 11.8 | 9.5 | 34.4 | 42.4 | 14.8 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.6 |
| Total $\operatorname{Del} /$ Veh (s) | 806.5 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR | Denied Del/Veh (s) |
| :--- |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 27.7 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 44.6 | 16.3 | 20.9 | 9.7 | 22.1 | 3.7 | 21.8 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.6 | 1.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 |
| Total Del/Veh (s) | 27.3 | 36.8 | 20.4 | 3.0 | 48.4 | 19.6 | 25.8 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.5 | 3.9 | 2.4 | 1.8 | 2.0 | 0.0 | 0.0 | 0.9 |
| Total Del/Veh (s) | 72.7 | 21.7 | 114.9 | 49.3 | 4.8 | 6.9 | 2.2 | 21.2 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 4.3 | 2.3 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 104.2 | 77.0 | 39.0 | 56.8 | 29.8 | 1.9 | 65.7 | 21.6 | 7.1 | 58.4 | 25.5 | 17.3 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.8 |
| Total Del/Veh (s) | 36.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.2 | 0.2 | 0.2 | 0.7 | 1.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 48.7 | 44.9 | 29.5 | 44.8 | 50.2 | 34.5 | 97.5 | 19.2 | 17.5 | 88.4 | 40.1 |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 35.2 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 18.8 | 0.2 | 10.3 | 3.3 | 1.5 | 8.4 | 1.4 | 3.1 |

## 8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 4.7 | 5.1 | 0.1 | 0.0 | 0.3 | 0.3 | 2.1 |
| Total Del/Veh (s) | 48.7 | 49.1 | 9.1 | 7.8 | 9.0 | 7.8 | 25.3 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh (s) | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 6.4 | 2.9 | 2.7 | 2.0 | 25.7 | 10.3 | 4.5 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 78.7 | 25.7 | 22.8 | 6.6 | 15.8 | 1.6 | 3.8 | 22.7 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Total Del/Veh (s) | 9.9 | 4.4 | 3.8 | 3.4 | 20.4 | 7.9 | 4.3 |  |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.6 | 0.1 | 0.2 | 0.3 | 0.3 | 3.9 | 0.0 | 0.0 |
| Total Del/Veh (s) | 38.9 | 18.8 | 11.0 | 42.0 | 22.7 | 7.1 | 34.0 | 33.7 | 6.2 | 26.6 | 15.7 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 20.9 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 | 0.2 |
| Total Del/Veh (s) | 5.1 | 2.1 | 1.2 | 11.3 | 3.7 | 3.1 | 31.6 | 16.0 | 25.9 | 7.5 | 4.1 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.6 | 3.4 | 3.0 | 0.6 | 0.7 | 0.4 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 3.0 | 1.2 | 0.4 | 0.3 | 0.9 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 5.1 | 3.5 | 6.6 | 2.1 | 1.8 | 4.2 | 2.1 | 1.6 | 2.4 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 11.4 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 17.4 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.3 | 0.2 | 4.0 | 0.1 | 0.1 |
| Total Del/Veh (s) | 60.2 | 8.4 | 5.6 | 68.0 | 4.8 | 3.1 | 57.1 | 49.5 | 5.7 | 47.0 | 48.3 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 14.8 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 1.6 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 806.5 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 10.2 | 23.5 | 13.1 | 14.7 | 14.8 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 22.4 | 18.8 | 13.3 | 18.7 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 23.1 | 12.6 | 10.1 | 13.8 |

4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.8 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 49.3 | 12.3 | 4.3 | 9.5 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh $(\mathrm{s})$ | 3.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 41.3 | 18.6 | 27.2 | 30.2 | 29.5 |

## 6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 24.5 | 14.8 | 19.5 | 30.8 | 23.4 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh $(\mathrm{s})$ | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 7.0 | 9.0 | 4.4 | 2.3 | 3.6 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.0 | 0.0 | 24.9 | 9.2 |
| Total Del/Veh (s) | 37.0 | 11.7 | 61.7 | 36.8 |

## Existing Conditions

## 9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.2 | 0.1 |
| Total Del/Veh (s) | 4.5 | 2.9 | 43.4 | 9.0 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 11.0 | 0.0 | 0.0 | 3.4 |
| Total Del/Veh (s) | 95.6 | 12.0 | 7.0 | 37.1 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | :---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.9 | 0.0 | 0.6 |
| Total Del/Veh $(\mathrm{s})$ | 3.5 | 4.2 | 13.5 | 4.1 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.2 | 1.2 | 0.0 | 0.2 |
| Total Del/Veh (s) | 17.5 | 13.8 | 21.0 | 18.5 | 15.7 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.8 | 0.1 | 0.1 | 0.5 |
| Total Del/Veh (s) | 1.5 | 5.6 | 14.7 | 12.1 | 4.9 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh (s) | 5.4 | 0.9 | 0.6 | 0.9 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 3.3 | 1.3 | 1.5 | 1.4 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.3 | 4.9 | 2.4 | 2.8 | 2.7 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(s)$ | 0.0 | 0.1 | 102.4 | 35.6 |
| Total Del/Veh (s) | 12.3 | 31.4 | 59.7 | 38.6 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh (s) | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 |
| Total Del/Veh (s) | 15.8 | 16.6 | 14.8 | 25.7 | 15.8 |

19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 1.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 14.3 | 12.5 | 37.6 | 37.4 | 17.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 13.5 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 376.1 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 28.5 | 29.1 | 7.5 | 25.4 | 27.5 | 13.6 | 26.8 | 12.2 | 5.7 | 30.2 | 13.0 | 6.4 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 14.8 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.5 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 28.1 | 13.8 | 34.4 | 9.1 | 16.2 | 3.6 | 18.7 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 28.3 | 21.4 | 12.9 | 2.5 | 37.2 | 5.7 | 13.8 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 4.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 74.4 | 12.5 | 100.4 | 14.4 | 5.1 | 4.3 | 1.9 | 9.5 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 3.5 | 1.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Total Del/Veh (s) | 46.9 | 38.3 | 5.4 | 48.3 | 27.3 | 1.9 | 59.2 | 26.2 | 10.0 | 99.0 | 18.6 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.4 |
| Total Del/Veh (s) | 29.5 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

|  |  | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Movement | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Denied Del/Veh (s) | 32.5 | 33.4 | 17.9 | 38.0 | 2.0 | 20.4 | 57.4 | 18.0 | 15.4 | 77.8 | 25.9 |
| Total Del/Veh (s) |  |  |  | 3.7 |  |  |  |  |  |  |  |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 23.4 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 7.0 | 0.0 | 9.0 | 5.7 | 4.6 | 2.2 | 13.2 | 1.2 | 0.0 | 3.6 |

## 8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.0 | 1.0 | 0.1 | 0.0 | 24.0 | 25.9 | 9.2 |
| Total Del/Veh (s) | 38.1 | 33.6 | 10.9 | 12.0 | 63.1 | 60.2 | 36.8 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.1 | 3.6 | 2.9 | 2.3 | 57.0 | 36.5 | 9.0 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 13.0 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 |
| Total Del/Veh (s) | 114.0 | 56.3 | 16.0 | 7.7 | 13.1 | 0.9 | 4.2 | 37.1 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.0 | 0.9 | 0.8 | 0.0 | 0.0 | 0.6 |
| Total Del/Veh $(\mathrm{s})$ | 13.7 | 3.3 | 4.3 | 3.6 | 17.5 | 12.1 | 4.1 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.3 | 4.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 28.0 | 14.5 | 5.4 | 33.0 | 17.0 | 8.9 | 26.1 | 26.3 | 5.1 | 22.6 | 16.3 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total DelVeh (s) | 15.7 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | NBL | NBR | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.9 | 0.8 | 0.1 | 0.1 | 0.1 | 0.5 |
| Total Del/Veh (s) | 7.0 | 1.1 | 0.7 | 8.3 | 5.5 | 17.7 | 6.2 | 11.9 | 4.9 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.0 | 3.2 | 3.2 | 0.6 | 0.6 | 0.6 | 0.9 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.3 | 1.3 | 1.5 | 0.8 | 1.4 |

## 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.3 | 5.0 | 4.4 | 2.4 | 1.7 | 6.0 | 2.6 | 2.5 | 2.7 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 104.5 | 96.3 | 35.6 |
| Total Del/Veh (s) | 20.3 | 1.1 | 8.5 | 40.0 | 19.4 | 77.8 | 6.9 | 38.6 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 0.2 |
| Total Del/Veh (s) | 34.8 | 18.3 | 14.7 | 28.5 | 15.2 | 7.2 | 15.4 | 5.8 | 3.3 | 29.3 | 34.3 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 15.8 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Senied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 3.8 | 0.2 | 0.2 |
| Total Del/Veh (s) | 58.2 | 8.2 | 4.9 | 59.3 | 9.0 | 7.5 | 49.3 | 45.1 | 4.7 | 48.1 | 45.7 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 17.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 13.5 |
| Total $\operatorname{Del} / \mathrm{Veh}(\mathrm{s})$ | 376.1 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 19.0 | 34.7 | 25.4 | 25.0 | 26.2 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 31.1 | 14.3 | 18.9 | 21.0 |

3: Missouri Flat Road \& EB Ramps Performance by approach

|  | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Approach | 1.7 | 0.0 | 0.0 | 0.4 |
| Denied Del/Veh (s) | 32.9 | 17.9 | 22.3 | 23.5 |

## 4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 2.8 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 45.5 | 19.1 | 5.4 | 12.5 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh (s) | 54.5 | 0.0 | 0.3 | 0.0 | 10.3 |
| Total Del/Veh (s) | 174.6 | 13.8 | 29.8 | 26.4 | 54.5 |

## 6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.3 | 2.0 | 0.2 | 0.0 | 0.3 |
| Total Del/Veh (s) | 35.6 | 44.1 | 32.7 | 37.1 | 35.9 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 12.4 | 10.6 | 2.7 | 4.0 | 4.2 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 45.3 | 0.0 | 0.3 | 18.8 |
| Total Del/Veh (s) | 98.8 | 10.3 | 10.8 | 47.0 |

## Existing Conditions

## 9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.2 | 0.1 |
| Total Del/Veh (s) | 3.8 | 2.9 | 25.6 | 6.8 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 20.2 | 14.6 | 9.0 | 13.8 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.1 | 4.0 | 10.2 | 4.2 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.3 | 1.6 | 0.0 | 0.2 |
| Total Del/Veh (s) | 20.3 | 20.2 | 26.0 | 23.2 | 21.4 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.4 | 0.9 | 0.2 | 0.2 |
| Total Del/Veh (s) | 2.3 | 4.0 | 24.6 | 10.8 | 4.4 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.3 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 7.7 | 1.1 | 0.6 | 1.4 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.0 | 1.6 | 0.4 | 1.3 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.3 | 4.2 | 2.3 | 2.6 | 2.6 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.3 | 2.4 | 0.8 |
| Total Del/Veh (s) | 19.4 | 30.7 | 33.6 | 27.6 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh (s) | 0.0 | 0.1 | 0.0 | 1.3 | 0.0 |
| Total Del/Veh (s) | 20.3 | 15.6 | 17.2 | 25.4 | 18.8 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 1.7 | 0.1 | 0.2 |
| Total Del/Veh (s) | 12.6 | 13.0 | 31.8 | 43.9 | 17.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 9.9 |
| Total $\operatorname{Del} /$ Veh (s) | 566.7 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 32.0 | 33.8 | 15.9 | 35.7 | 38.2 | 27.8 | 47.8 | 22.9 | 9.6 | 38.4 | 23.8 | 10.9 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 26.2 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.5 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 39.4 | 16.0 | 22.3 | 10.1 | 22.5 | 3.8 | 21.0 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.8 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 26.0 | 35.6 | 18.1 | 1.7 | 46.4 | 16.3 | 23.5 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 79.8 | 28.8 | 89.7 | 23.6 | 5.8 | 5.4 | 2.3 | 12.5 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 54.4 | 54.3 | 55.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.2 | 0.0 | 0.0 |
| Total Del/Veh (s) | 187.2 | 152.5 | 114.4 | 55.0 | 29.4 | 1.8 | 77.6 | 25.6 | 9.2 | 65.1 | 25.0 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 10.3 |
| Total DelVeh (s) | 54.5 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.3 |
| Total Del/Veh (s) | 35.9 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Total Del/Veh (s) | 12.4 | 1.0 | 10.7 | 2.8 | 0.6 | 9.9 | 3.9 | 4.2 |

8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 44.2 | 47.0 | 0.1 | 0.0 | 0.3 | 0.3 | 18.8 |
| Total Del/Veh (s) | 100.1 | 96.8 | 11.2 | 9.6 | 12.2 | 9.8 | 47.0 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.1 | 3.2 | 3.0 | 2.6 | 38.1 | 23.9 | 6.8 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 25.1 | 16.2 | 21.8 | 6.3 | 14.3 | 2.3 | 4.2 | 13.8 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 7.1 | 4.1 | 4.0 | 3.5 | 19.3 | 0.1 | 6.4 | 4.2 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.6 | 0.2 | 0.4 | 0.4 | 0.3 | 3.9 | 0.0 | 0.0 |
| Total Del/Veh (s) | 38.9 | 18.6 | 11.0 | 45.0 | 23.8 | 7.8 | 37.1 | 35.6 | 6.7 | 27.2 | 16.5 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 21.4 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Tenied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 1.1 | 0.1 | 0.2 |
| Total Del/Veh (s) | 5.1 | 2.0 | 1.3 | 10.5 | 3.8 | 4.0 | 38.4 | 35.7 | 17.1 | 23.0 | 29.2 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 4.4 |

## 14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.3 | 0.1 |
| Total Del/Veh (s) | 9.5 | 4.3 | 3.2 | 0.9 | 0.6 | 0.5 | 1.4 |

## 15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.0 | 1.6 | 0.4 | 0.3 | 1.3 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.3 | 4.2 | 6.8 | 2.2 | 1.2 | 5.0 | 2.4 | 2.0 | 2.6 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.1 | 0.3 | 2.6 | 1.4 | 0.8 |
| Total Del/Veh (s) | 18.1 | 19.8 | 45.6 | 24.2 | 40.3 | 3.8 | 27.6 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 18.8 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 17.2 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 9.9 |
| Total $\operatorname{Del} / \mathrm{Veh}(\mathrm{s})$ | 566.7 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 10.6 | 24.1 | 13.3 | 14.5 | 15.0 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 22.5 | 18.8 | 13.9 | 18.8 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 24.3 | 12.7 | 10.8 | 14.4 |

4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.8 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 48.0 | 13.8 | 4.8 | 10.5 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 3.0 | 0.0 | 0.1 | 0.5 | 0.6 |
| Total Del/Veh (s) | 43.0 | 20.3 | 30.5 | 35.7 | 33.3 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 27.6 | 17.2 | 18.9 | 31.5 | 23.5 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 9.1 | 7.2 | 4.5 | 2.4 | 3.7 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.0 | 15.2 | 5.6 |
| Total Del/Veh (s) | 21.3 | 10.6 | 57.9 | 30.8 |

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.2 | 0.1 |
| Total Del/Veh (s) | 4.5 | 2.9 | 48.8 | 10.1 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 19.5 | 0.0 | 0.0 | 6.1 |
| Total Del/Veh (s) | 111.1 | 12.5 | 7.4 | 42.4 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 1.0 | 0.0 | 0.7 |
| Total Del/Veh (s) | 3.9 | 4.3 | 12.6 | 4.3 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.2 | 1.1 | 0.0 | 0.2 |
| Total Del/Veh (s) | 17.9 | 15.9 | 22.6 | 19.2 | 17.3 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.9 | 0.1 | 0.1 | 0.6 |
| Total Del/Veh (s) | 1.5 | 5.4 | 17.6 | 11.4 | 4.8 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.2 | 0.1 |
| Total Del/Veh (s) | 5.8 | 1.0 | 0.6 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.7 | 1.6 | 1.5 | 1.6 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.5 | 5.4 | 2.3 | 2.8 | 2.7 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 1.2 | 0.2 | 230.5 | 75.7 |
| Total Del/Veh (s) | 19.8 | 43.4 | 36.7 | 69.2 | 44.2 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 |
| Total Del/Veh (s) | 15.8 | 16.1 | 16.3 | 22.1 | 16.2 |

19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh $(\mathrm{s})$ | 0.0 | 0.0 | 1.2 | 0.1 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 13.2 | 9.0 | 36.8 | 36.6 | 14.7 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 25.3 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 401.8 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 15.0 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.5 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 28.2 | 13.8 | 33.7 | 8.9 | 16.8 | 3.6 | 18.8 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total Del/Veh (s) | 28.9 | 22.8 | 13.1 | 2.5 | 37.3 | 6.7 | 14.4 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 70.5 | 12.6 | 91.3 | 16.2 | 5.4 | 4.9 | 2.1 | 10.5 |

5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 3.5 | 1.0 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.9 | 0.5 |
| Total Del/Veh (s) | 49.6 | 40.0 | 5.1 | 56.4 | 28.0 | 1.9 | 65.3 | 29.6 | 11.8 | 122.0 | 20.3 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.6 |
| Total Del/Veh (s) | 33.3 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

|  |  | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Movement | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Senied Del/Veh (s) | 43.5 | 45.2 | 17.1 | 42.3 | 1.9 | 27.4 | 55.5 | 17.6 | 15.0 | 78.5 | 26.9 |
| Total Del/Veh (s) |  |  | 4.8 |  |  |  |  |  |  |  |  |

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 23.5 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 9.1 | 0.0 | 7.4 | 9.4 | 4.7 | 2.2 | 14.2 | 1.2 | 0.1 | 3.7 |

## 8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.4 | 0.4 | 0.1 | 0.0 | 14.8 | 15.6 | 5.6 |
| Total Del/Veh (s) | 22.4 | 18.3 | 9.9 | 10.9 | 58.7 | 57.3 | 30.8 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.4 | 3.5 | 2.9 | 2.4 | 61.0 | 43.7 | 10.1 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 19.4 | 19.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1 |
| Total Del/Veh (s) | 132.2 | 67.7 | 16.6 | 8.0 | 13.8 | 1.0 | 4.6 | 42.4 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 1.0 | 1.2 | 0.0 | 0.0 | 0.7 |
| Total Del/Veh (s) | 14.8 | 3.7 | 4.3 | 3.8 | 20.4 | 10.5 | 4.3 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 4.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 29.3 | 14.3 | 5.6 | 35.9 | 19.4 | 10.7 | 28.5 | 27.3 | 4.9 | 23.3 | 17.4 | 9.5 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total DelVeh (s) | 17.3 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | NBL | NBR | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 1.0 | 0.9 | 0.1 | 0.1 | 0.1 | 0.6 |
| Total Del/Veh (s) | 7.1 | 1.2 | 0.7 | 9.3 | 5.4 | 20.9 | 10.0 | 11.4 | 4.8 |

14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.1 | 3.9 | 3.1 | 0.7 | 0.6 | 0.4 | 1.0 |

15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.5 | 1.6 | 1.5 | 0.6 | 1.6 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.5 | 5.4 | 4.7 | 2.3 | 2.0 | 6.7 | 2.6 | 2.6 | 2.7 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Senied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 4.0 | 0.2 | 0.2 | 0.1 | 0.2 | 0.6 | 244.6 | 232.4 |
| Total Del/Veh (s) | 33.6 | 13.5 | 11.5 | 62.6 | 43.9 | 15.7 | 45.3 | 25.8 | 17.7 | 96.9 | 90.7 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 75.7 |
| Total Del/Veh (s) | 44.2 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 16.2 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Senied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 4.0 | 0.1 | 0.2 |
| Total Del/Veh (s) | 57.7 | 9.1 | 4.8 | 58.1 | 5.4 | 3.5 | 47.8 | 47.3 | 4.7 | 45.9 | 42.2 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 14.7 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied Del/Veh (s) | 25.3 |
| Total Del/Veh (s) | 401.8 |

1: Missouri Flat Road \& Plaza Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 |
| Total Del/Veh (s) | 18.6 | 36.6 | 25.2 | 26.0 | 26.6 |

2: Missouri Flat Road \& WB Ramps Performance by approach

| Approach | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.2 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 32.6 | 14.1 | 19.2 | 21.4 |

3: Missouri Flat Road \& EB Ramps Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.7 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 31.6 | 18.8 | 24.5 | 24.5 |

## 4: Missouri Flat Road \& Mother Lode Drive Performance by approach

| Approach | EB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 2.8 | 0.4 | 0.0 | 0.2 |
| Total Del/Veh (s) | 43.2 | 28.9 | 5.8 | 17.4 |

5: Missouri Flat Road \& Forni Road Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 68.5 | 0.0 | 0.2 | 0.1 | 12.8 |
| Total Del/Veh (s) | 181.2 | 13.4 | 29.6 | 29.1 | 55.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 1.6 | 0.5 | 0.0 | 0.3 |
| Total Del/Veh (s) | 37.4 | 43.9 | 28.7 | 40.5 | 36.0 |

7: Missouri Flat Road \& China Garden Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 14.1 | 10.1 | 2.7 | 4.0 | 4.1 |

8: SR 49 \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 33.6 | 0.0 | 0.3 | 14.2 |
| Total Del/Veh (s) | 91.1 | 9.6 | 10.1 | 44.1 |

9: Pleasant Valley Rd \& Forni Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.2 | 0.1 |
| Total Del/Veh (s) | 3.9 | 2.8 | 27.9 | 7.2 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 20.0 | 15.4 | 9.3 | 14.0 |

11: Pleasant Valley Rd \& China Garden Rd Performance by approach

| Approach | EB | WB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 4.4 | 4.0 | 8.9 | 4.4 |

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.2 | 1.5 | 0.0 | 0.2 |
| Total Del/Veh (s) | 20.6 | 20.3 | 26.1 | 24.9 | 22.0 |

13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.4 | 0.4 | 0.1 | 0.2 |
| Total Del/Veh (s) | 2.3 | 4.0 | 22.7 | 10.3 | 4.3 |

14: Diamond Rd \& Truck St Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh $(s)$ | 0.1 | 0.0 | 0.3 | 0.1 |
| Total Del/Veh $(\mathrm{s})$ | 7.8 | 0.9 | 0.7 | 1.3 |

15: Diamond Rd \& Bradley Dr Performance by approach

| Approach | EB | NB | SB | All |
| :--- | :--- | :--- | :--- | :--- |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.7 | 1.8 | 0.7 | 1.5 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 5.7 | 4.8 | 2.4 | 2.6 | 2.6 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 1.1 | 0.7 | 7.7 | 2.3 |
| Total Del/Veh (s) | 25.9 | 44.3 | 36.9 | 39.0 | 34.2 |

## 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh $(\mathrm{s})$ | 0.0 | 0.1 | 0.0 | 1.3 | 0.0 |
| Total Del/Veh $(\mathrm{s})$ | 20.9 | 17.1 | 17.7 | 25.1 | 19.4 |

## 19: Throwita Way \& Diamond Springs Parkway Performance by approach

| Approach | EB | WB | NB | SB | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del $/$ Veh $(\mathrm{s})$ | 0.0 | 0.0 | 1.7 | 0.1 | 0.2 |
| Total Del/Veh (s) | 13.3 | 12.9 | 31.9 | 40.5 | 16.9 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 10.7 |
| Total $\operatorname{Del} /$ Veh (s) | 614.1 |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR | Denied Del/Veh (s) |
| :--- |

1: Missouri Flat Road \& Plaza Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.1 |
| Total Del/Veh (s) | 26.6 |

2: Missouri Flat Road \& WB Ramps Performance by movement

| Movement | WBL | WBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.5 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 41.5 | 16.3 | 21.2 | 10.2 | 22.9 | 4.0 | 21.4 |

3: Missouri Flat Road \& EB Ramps Performance by movement

| Movement | EBL | EBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 1.8 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Del/Veh (s) | 25.3 | 34.1 | 19.1 | 1.5 | 46.5 | 19.1 | 24.5 |

4: Missouri Flat Road \& Mother Lode Drive Performance by movement

| Movement | EBL | EBR | NBL | NBT | NBR | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.2 | 4.1 | 2.1 | 0.3 | 0.4 | 0.0 | 0.0 | 0.2 |
| Total Del/Veh (s) | 73.5 | 29.3 | 111.9 | 38.1 | 6.8 | 5.9 | 2.2 | 17.4 |

5: Missouri Flat Road \& Forni Road Performance by movement

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Total Del/Veh (s) | 69.1 | 58.1 | 69.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 | 0.0 | 0.1 |

## 5: Missouri Flat Road \& Forni Road Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 12.8 |
| Total Del/Veh $(\mathrm{s})$ | 55.7 |

6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 6: Missouri Flat Road \& Golden Center Drive Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.3 |
| Total Del/Veh $(\mathrm{s})$ | 36.0 |

## 7: Missouri Flat Road \& China Garden Rd Performance by movement

| Movement | EBR | WBT | WBR | NBT | NBR | SBL | SBT | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Total Del/Veh (s) | 14.1 | 0.7 | 10.2 | 2.7 | 0.6 | 8.6 | 4.0 | 4.1 |

8: SR 49 \& Pleasant Valley Rd Performance by movement

| Movement | EBT | EBR | WBL | WBT | NBL | NBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 34.4 | 32.4 | 0.1 | 0.0 | 0.3 | 0.3 | 14.2 |
| Total Del/Veh (s) | 93.0 | 87.9 | 10.8 | 8.7 | 10.9 | 9.4 | 44.1 |

9: Pleasant Valley Rd \& Forni Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Total Del/Veh (s) | 7.4 | 3.3 | 2.9 | 2.2 | 46.8 | 25.1 | 7.2 |

10: Pleasant Valley Rd \& Missouri Flat Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 24.6 | 16.2 | 22.6 | 6.4 | 14.4 | 2.4 | 4.6 | 14.0 |

11: Pleasant Valley Rd \& China Garden Rd Performance by movement

| Movement | EBL | EBT | WBT | WBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 9.8 | 4.4 | 4.0 | 3.4 | 17.2 | 0.0 | 5.6 | 4.4 |

12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 22.0 |

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

|  | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

## 13: Driveway/Racquet Way \& Pleasant Valley Rd Performance by movement

| Movement | All |
| :--- | :--- |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 4.3 |

## 14: Diamond Rd \& Truck St Performance by movement

| Movement | EBL | EBR | NBL | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 |
| Total Del/Veh (s) | 9.7 | 4.3 | 3.1 | 0.8 | 0.7 | 0.5 | 1.3 |

## 15: Diamond Rd \& Bradley Dr Performance by movement

| Movement | EBR | NBT | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 3.7 | 1.8 | 0.7 | 0.2 | 1.5 |

16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln Performance by movement

| Movement | EBR | WBR | NBL | NBT | NBR | SBL | SBT | SBR | All |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 5.7 | 4.7 | 8.5 | 2.3 | 1.8 | 5.3 | 2.4 | 2.1 | 2.6 |

17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SBR |  |  |  |  |  |  |  |  |  |  |  |
| Denied Del/Veh (s) | 0.6 | 0.1 | 0.1 | 4.1 | 0.2 | 0.2 | 0.3 | 0.8 | 0.5 | 8.6 | 7.8 |
| Total Del/Veh (s) | 35.2 | 21.8 | 23.5 | 62.6 | 41.7 | 26.3 | 50.3 | 31.0 | 22.3 | 83.0 | 46.1 |

## 17: Diamond Rd \& Diamond Springs Parkway/Project Access Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 2.3 |
| Total Del/Veh $(\mathrm{s})$ | 34.2 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Denied Del/Veh (s) | 0.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 4.2 | 0.1 | 0.1 |
| Total Del/Veh (s) | 40.7 | 20.8 | 20.8 | 31.1 | 15.0 | 5.2 | 19.6 | 12.2 | 4.4 | 34.9 | 34.3 | 9.3 |

18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.0 |
| Total Del/Veh (s) | 19.4 |

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | SBR

19: Throwita Way \& Diamond Springs Parkway Performance by movement

| Movement | All |
| :--- | ---: |
| Denied Del/Veh (s) | 0.2 |
| Total Del/Veh (s) | 16.9 |

Total Zone Performance

|  |  |
| :--- | ---: |
| Denied $\operatorname{Del} /$ Veh (s) | 10.7 |
| Total $\operatorname{Del} /$ Veh $(\mathrm{s})$ | 614.1 |

Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue ( ft$)$ | 79 | 53 | 137 | 154 | 100 | 113 | 164 | 171 | 192 | 87 | 107 | 118 |
| Average Queue (ft) | 36 | 21 | 62 | 62 | 33 | 63 | 59 | 80 | 67 | 31 | 42 | 38 |
| 95th Queue (ft) | 65 | 47 | 113 | 122 | 82 | 100 | 132 | 144 | 136 | 69 | 85 | 89 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 231 | 229 | 162 | 115 | 137 | 149 | 376 | 250 | 180 | 167 |
| Average Queue (ft) | 146 | 142 | 77 | 30 | 120 | 132 | 123 | 53 | 84 | 63 |
| 95th Queue (ft) | 215 | 210 | 130 | 75 | 164 | 169 | 323 | 145 | 152 | 128 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 2 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  | 1 | 10 | 0 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 4 | 33 | 0 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 145 | 199 | 187 | 166 | 166 | 105 | 98 | 128 | 131 | 154 |
| Average Queue (ft) | 41 | 102 | 78 | 139 | 113 | 22 | 33 | 60 | 27 | 36 |
| 95th Queue (ft) | 100 | 170 | 148 | 199 | 189 | 74 | 74 | 94 | 81 | 101 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 14 | 6 | 0 |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 50 | 21 | 0 |  |  |  |  |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  | 0 | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 0 | 0 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | R | L | T | T | T | T | R |
| Maximum Queue (ft) | 42 | 191 | 81 | 89 | 330 | 222 | 161 | 169 | 82 |
| Average Queue (ft) | 7 | 74 | 23 | 13 | 123 | 55 | 101 | 113 | 7 |
| 95th Queue (ft) | 30 | 145 | 64 | 51 | 278 | 156 | 179 | 184 | 55 |
| Link Distance (ft) |  | 633 |  |  | 1547 | 1547 | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 5 | 7 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  | 35 | 48 | 0 |
| Storage Bay Dist (ft) | 200 |  | 200 | 150 |  |  |  |  | 200 |
| Storage Blk Time (\%) |  | 1 |  |  | 6 | 0 |  | 7 | 0 |
| Queuing Penalty (veh) |  | 1 |  |  | 1 | 0 |  | 3 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T | T |
| Maximum Queue (ft) | 181 | 182 | 143 | 48 | 110 | 120 | 256 | 360 | 369 | 175 | 33 | 47 |
| Average Queue (ft) | 73 | 97 | 49 | 17 | 44 | 51 | 51 | 202 | 204 | 36 | 2 | 3 |
| 95th Queue (ft) | 150 | 167 | 106 | 42 | 91 | 100 | 158 | 344 | 355 | 147 | 29 | 35 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  | 317 | 317 |  | 652 | 652 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 9 | 10 |  |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 250 |  |  | 150 |  |  |
| Storage Blk Time (\%) | 0 | 0 | 0 |  |  | 0 |  | 5 | 16 | 0 |  |  |
| Queuing Penalty (veh) | 0 | 0 | 0 |  |  | 0 |  | 3 | 10 | 0 |  |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 324 | 388 | 375 | 175 |
| Average Queue (ft) | 212 | 173 | 173 | 76 |
| 95th Queue (ft) | 334 | 373 | 328 | 181 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 5 | 1 |  |
| Queuing Penalty (veh) |  | 37 | 3 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 8 | 2 | 8 | 0 |
| Queuing Penalty (veh) | 30 | 4 | 21 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 55 | 106 | 157 | 286 | 295 | 87 | 113 | 190 | 361 | 487 | 18 |
| Average Queue (ft) | 18 | 45 | 38 | 160 | 182 | 4 | 7 | 62 | 102 | 199 | 2 |
| 95th Queue (ft) | 44 | 91 | 98 | 265 | 290 | 40 | 51 | 135 | 261 | 395 | 12 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 |  |
| Upstream Blk Time (\%) |  |  |  | 3 | 5 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 17 | 29 |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  |  | 500 |
| Storage Blk Time (\%) |  |  |  | 7 |  |  |  | 0 | 4 | 0 |  |
| Queuing Penalty (veh) |  |  |  | 3 |  |  |  | 0 | 3 | 0 |  |

## Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L |
| Maximum Queue (ft) | 37 | 90 | 22 | 27 | 98 |
| Average Queue (ft) | 6 | 38 | 3 | 2 | 39 |
| 95th Queue (ft) | 27 | 69 | 16 | 14 | 78 |
| Link Distance (ft) | 158 | 1439 |  | 558 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 220 | 104 | 188 | 529 |
| Average Queue (ft) | 91 | 54 | 77 | 188 |
| 95th Queue (ft) | 169 | 99 | 135 | 465 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) |  |  |  | 6 |
| Queuing Penalty (veh) |  |  |  | 0 |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 1 | 6 |  |
| Queuing Penalty (veh) |  | 3 | 10 |  |

Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 174 | 6 | 287 |
| Average Queue (ft) | 55 | 0 | 71 |
| 95th Queue (ft) | 120 | 5 | 225 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T |
| Maximum Queue (ft) | 211 | 224 | 559 | 255 | 214 | 159 | 98 | 2 |
| Average Queue (ft) | 154 | 138 | 191 | 125 | 78 | 65 | 37 | 0 |
| 95th Queue (ft) | 233 | 261 | 542 | 208 | 157 | 123 | 81 | 2 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 |
| Upstream Blk Time (\%) |  |  | 2 |  |  | 1 | 0 |  |
| Queuing Penalty (veh) |  |  | 12 |  |  | 2 | 0 |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |
| Storage Blk Time (\%) | 16 | 16 | 0 | 1 | 0 |  |  |  |
| Queuing Penalty (veh) | 32 | 32 | 1 | 4 | 0 |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 136 | 2 | 40 |
| Average Queue (ft) | 15 | 0 | 12 |
| 95th Queue (ft) | 77 | 2 | 38 |
| Link Distance (ft) | 1506 | 1257 | 266 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | B60 | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | T | LT | R | L | TR |
| Maximum Queue (ft) | 134 | 151 | 117 | 130 | 590 | 195 | 98 | 140 | 62 | 123 | 114 |
| Average Queue (ft) | 65 | 76 | 31 | 22 | 286 | 133 | 5 | 63 | 20 | 56 | 43 |
| 95th Queue (ft) | 115 | 136 | 85 | 84 | 540 | 252 | 66 | 114 | 54 | 106 | 86 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 458 | 614 |  |  | 1686 |
| Upstream Blk Time (\%) |  |  |  |  | 2 |  | 0 |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 21 |  | 0 |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  |  | 90 | 340 |  |
| Storage Blk Time (\%) |  | 0 |  |  | 27 | 0 |  | 3 | 0 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  | 93 | 2 |  | 1 | 0 |  |  |

## Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | WB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | L | TR | LTR | LTR |
| Maximum Queue (ft) | 52 | 2 | 18 | 15 | 61 | 76 |
| Average Queue (ft) | 15 | 0 | 1 | 1 | 21 | 30 |
| 95th Queue (ft) | 44 | 0 | 9 | 12 | 51 | 59 |
| Link Distance (ft) |  | 458 |  | 2746 | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 90 |  | 60 |  |  |  |
| Storage Blk Time (\%) |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  |  |  | 0 |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 31 | 54 |
| Average Queue (ft) | 11 | 7 |
| 95th Queue (ft) | 33 | 35 |
| Link Distance (ft) | 488 | 395 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB |
| :--- | ---: |
| Directions Served | R |
| Maximum Queue (ft) | 33 |
| Average Queue (ft) | 12 |
| 95th Queue (ft) | 35 |
| Link Distance (ft) | 627 |
| Upstream Blk Time (\%) |  |
| Queuing Penalty (veh) |  |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | L |
| Maximum Queue (ft) | 59 | 60 | 28 | 31 |
| Average Queue (ft) | 25 | 23 | 2 | 5 |
| 95th Queue (ft) | 48 | 51 | 13 | 23 |
| Link Distance (ft) | 602 | 1011 |  |  |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  | 200 | 100 |
| Storage Bay Dist (ft) |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | L | T | T | R |
| Maximum Queue (ft) | 66 | 77 | 68 | 60 | 80 | 76 | 75 |
| Average Queue (ft) | 19 | 24 | 22 | 28 | 17 | 27 | 30 |
| 95th Queue (ft) | 50 | 55 | 50 | 53 | 51 | 59 | 57 |
| Link Distance (ft) | 893 | 893 |  |  | 570 | 386 | 386 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 350 | 350 |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | WB | WB | WB | WB | NB | NB | NB | B81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | T | L | T | T | R | L | L | TR | T |
| Maximum Queue (ft) | 29 | 90 | 94 | 9 | 74 | 112 | 130 | 24 | 225 | 282 | 37 | 82 |
| Average Queue (ft) | 4 | 38 | 34 | 0 | 25 | 48 | 51 | 3 | 117 | 130 | 9 | 3 |
| 95th Queue (ft) | 21 | 74 | 76 | 7 | 58 | 90 | 97 | 15 | 201 | 225 | 32 | 36 |
| Link Distance (ft) |  | 1589 | 1589 | 216 |  | 2037 | 2037 |  |  | 225 | 225 | 172 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  | 0 | 1 |  | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 0 | 5 |  | 0 |
| Storage Bay Dist (ft) | 125 |  |  |  | 500 |  |  | 175 | 275 |  |  |  |
| Storage Blk Time (\%) |  | 0 |  |  |  |  |  |  | 0 | 1 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  |  |  | 1 | 5 |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | SB | SB |
| :--- | ---: | ---: |
| Directions Served | L | TR |
| Maximum Queue (ft) | 27 | 30 |
| Average Queue (ft) | 4 | 8 |
| 95th Queue (ft) | 20 | 26 |
| Link Distance (ft) |  | 278 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) | 50 | 0 |
| Storage Blk Time (\%) |  | 0 |
| Queuing Penalty (veh) |  | 0 |

## Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 60 | 62 | 95 | 33 | 81 | 77 | 77 | 127 | 30 | 83 |
| Average Queue (ft) | 14 | 7 | 14 | 3 | 27 | 16 | 19 | 44 | 8 | 29 |
| 95th Queue (ft) | 44 | 34 | 56 | 18 | 65 | 50 | 55 | 92 | 28 | 67 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 893 | 893 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 200 |  |  | 200 | 200 |  |  |  | 200 |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |

Zone Summary
Zone wide Queuing Penalty: 603

Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SB |  |  |  |  |  |  |  |  |  |  |  |
| irections Served | LTR | R | L | LTR | L | L | T | T | R | L | T |
| Maximum Queue (ft) | 245 | 186 | 284 | 252 | 181 | 184 | 186 | 176 | 226 | 96 | 145 |
| TR |  |  |  |  |  |  |  |  |  |  |  |
| Average Queue (ft) | 127 | 57 | 157 | 138 | 102 | 120 | 99 | 101 | 106 | 31 | 70 |
| 95th Queue (ft) | 207 | 129 | 241 | 232 | 172 | 179 | 179 | 162 | 191 | 70 | 124 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 | 118 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  | 200 | 200 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |  |  | 150 | 0 |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 0 |  |  |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 301 | 260 | 198 | 168 | 137 | 148 | 258 | 152 | 287 | 258 |
| Average Queue (ft) | 172 | 146 | 95 | 35 | 107 | 118 | 84 | 59 | 161 | 138 |
| 95th Queue (ft) | 261 | 233 | 163 | 99 | 161 | 158 | 187 | 120 | 268 | 246 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 0 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  | 0 | 2 | 1 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 2 | 10 | 2 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 285 | 325 | 311 | 167 | 165 | 87 | 161 | 174 | 375 | 383 |
| Average Queue (ft) | 111 | 187 | 163 | 161 | 128 | 16 | 102 | 126 | 140 | 157 |
| 95th Queue (ft) | 218 | 279 | 259 | 166 | 183 | 57 | 167 | 187 | 317 | 322 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 41 | 9 |  |  |  | 0 | 0 |
| Queuing Penalty (veh) |  |  |  | 152 | 33 |  |  |  | 2 | 2 |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  | 1 | 5 | 7 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 6 | 29 | 24 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | EB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | R | L | T | T | R | T | T | R |
| Maximum Queue (ft) | 37 | 135 | 64 | 174 | 756 | 661 | 78 | 170 | 171 | 110 |
| Average Queue (ft) | 4 | 57 | 25 | 71 | 398 | 281 | 3 | 125 | 127 | 9 |
| 95th Queue (ft) | 22 | 112 | 53 | 183 | 705 | 596 | 47 | 193 | 188 | 65 |
| Link Distance (ft) |  | 633 |  |  | 1533 | 1533 |  | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 10 | 11 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 95 | 102 | 0 |
| Storage Bay Dist (ft) | 200 |  | 200 | 150 |  |  | 250 |  |  | 200 |
| Storage Blk Time (\%) |  |  |  | 0 | 46 | 1 | 0 |  | 11 | 0 |
| Queuing Penalty (veh) |  |  |  | 0 | 21 | 3 | 0 |  | 7 | 1 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T |
| T |  |  |  |  |  |  |  |  |  |  |  |
| Maximum Queue (ft) | 207 | 220 | 934 | 88 | 61 | 86 | 259 | 370 | 379 | 126 | 48 |
| Average Queue (ft) | 193 | 208 | 361 | 32 | 15 | 32 | 73 | 181 | 192 | 12 | 2 |
| 95th Queue (ft) | 235 | 243 | 869 | 69 | 45 | 73 | 174 | 338 | 361 | 80 | 26 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  | 317 | 317 | 33 |  |
| Upstream Blk Time (\%) |  |  | 1 |  |  |  |  | 2 | 3 |  | 652 |
| Queuing Penalty (veh) |  |  | 0 |  |  |  |  | 9 | 13 |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 250 |  |  | 150 |  |
| Storage Blk Time (\%) | 7 | 35 | 0 |  |  |  | 0 | 5 | 16 | 0 |  |
| Queuing Penalty (veh) | 9 | 47 | 1 |  |  |  | 0 | 4 | 4 | 0 |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 324 | 391 | 387 | 175 |
| Average Queue (ft) | 158 | 285 | 343 | 148 |
| 95th Queue (ft) | 301 | 440 | 454 | 234 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 4 | 13 |  |
| Queuing Penalty (veh) |  | 37 | 128 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 1 | 8 | 29 | 1 |
| Queuing Penalty (veh) | 4 | 13 | 122 | 3 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 165 | 245 | 174 | 283 | 291 | 110 | 125 | 199 | 641 | 690 | 322 |
| Average Queue (ft) | 64 | 138 | 90 | 170 | 184 | 9 | 12 | 72 | 265 | 375 | 13 |
| 95th Queue (ft) | 128 | 230 | 174 | 286 | 298 | 69 | 80 | 155 | 590 | 697 | 138 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 | 44 |
| Upstream BIk Time (\%) | 0 |  |  | 5 | 6 |  |  |  | 0 | 2 |  |
| Queuing Penalty (veh) | 0 |  |  | 27 | 35 |  |  |  | 3 | 14 |  |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  |  | 500 |
| Storage Blk Time (\%) |  |  | 5 | 10 |  |  |  | 0 | 11 | 8 | 0 |
| Queuing Penalty (veh) |  |  | 22 | 9 |  |  |  | 0 | 8 | 1 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | B25 |
| :--- | ---: |
| Directions Served | T |
| Maximum Queue (ft) | 136 |
| Average Queue (ft) | 8 |
| 95th Queue (ft) | 80 |
| Link Distance (ft) | 317 |
| Upstream Blk Time (\%) | 0 |
| Queuing Penalty (veh) | 0 |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | R | R | TR | L |
| Maximum Queue (ft) | 32 | 123 | 4 | 70 |
| Average Queue (ft) | 4 | 54 | 0 | 26 |
| 95th Queue (ft) | 21 | 96 | 3 | 56 |
| Link Distance (ft) | 158 | 1440 | 558 |  |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 150 |
| Storage Bay Dist (ft) |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 739 | 104 | 162 | 125 |
| Average Queue (ft) | 309 | 59 | 62 | 65 |
| 95th Queue (ft) | 760 | 98 | 109 | 106 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) | 13 |  |  |  |
| Queuing Penalty (veh) | 0 |  |  |  |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 3 | 2 |  |
| Queuing Penalty (veh) |  | 9 | 4 |  |

## Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 154 | 12 | 173 |
| Average Queue (ft) | 39 | 0 | 48 |
| 95th Queue (ft) | 107 | 7 | 121 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T |
| Maximum Queue (ft) | 212 | 224 | 635 | 248 | 188 | 208 | 128 | 145 |
| Average Queue (ft) | 156 | 109 | 237 | 113 | 57 | 153 | 56 | 21 |
| 95th Queue (ft) | 246 | 278 | 588 | 199 | 136 | 224 | 104 | 93 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 |
| Upstream Blk Time (\%) |  |  | 2 |  |  | 16 | 0 |  |
| Queuing Penalty (veh) |  |  | 14 |  |  | 74 | 1 |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |
| Storage Blk Time (\%) | 27 | 19 | 2 | 0 | 0 |  |  |  |
| Queuing Penalty (veh) | 91 | 65 | 5 | 1 | 0 |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 197 | 52 |
| Average Queue (ft) | 17 | 20 |
| 95th Queue (ft) | 102 | 48 |
| Link Distance (ft) | 1506 | 266 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | LT | R | L | TR |
| Maximum Queue (ft) | 204 | 343 | 263 | 129 | 388 | 195 | 172 | 99 | 271 | 128 |
| Average Queue (ft) | 76 | 163 | 102 | 38 | 169 | 69 | 70 | 30 | 135 | 53 |
| 95th Queue (ft) | 161 | 272 | 204 | 101 | 320 | 182 | 136 | 70 | 223 | 99 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 614 |  | 1686 |  |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 0 |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  | 90 | 340 |  |
| Storage Blk Time (\%) | 0 | 5 | 0 | 0 | 19 | 0 | 6 | 0 | 0 |  |
| Queuing Penalty (veh) | 2 | 25 | 1 | 1 | 45 | 0 | 3 | 0 | 0 |  |

Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | B60 | WB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | T | L | TR | LTR | LTR |
| Maximum Queue (ft) | 71 | 15 | 50 | 48 | 7 | 111 | 75 |
| Average Queue (ft) | 26 | 1 | 2 | 13 | 0 | 44 | 35 |
| 95th Queue (ft) | 58 | 14 | 51 | 41 | 4 | 88 | 61 |
| Link Distance (ft) |  | 458 | 549 |  | 2746 | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  |  |  | 1 |  |
| Queuing Penalty (veh) |  |  |  |  |  | 0 |  |
| Storage Bay Dist (ft) | 90 |  |  | 60 |  |  |  |
| Storage Blk Time (\%) | 0 |  |  | 0 |  |  |  |
| Queuing Penalty (veh) | 1 |  |  | 1 |  |  |  |

## Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 50 | 50 |
| Average Queue (ft) | 23 | 6 |
| 95th Queue (ft) | 44 | 31 |
| Link Distance (ft) | 488 | 395 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB |
| :--- | ---: |
| Directions Served | R |
| Maximum Queue (ft) | 41 |
| Average Queue (ft) | 18 |
| 95th Queue $(\mathrm{ft})$ | 41 |
| Link Distance (ft) | 627 |
| Upstream Blk Time (\%) |  |
| Queuing Penalty (veh) |  |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | L | TR |
| Maximum Queue (ft) | 65 | 52 | 32 | 35 | 3 |
| Average Queue (ft) | 29 | 21 | 6 | 7 | 0 |
| 95th Queue (ft) | 54 | 46 | 25 | 27 | 3 |
| Link Distance (ft) | 606 | 1004 |  |  | 569 |
| Upstream Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 200 | 100 |  |
| Storage Bay Dist (ft) |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | L | T | T | R |
| Maximum Queue (ft) | 71 | 133 | 57 | 67 | 128 | 138 | 61 |
| Average Queue (ft) | 25 | 50 | 20 | 28 | 41 | 58 | 24 |
| 95th Queue (ft) | 56 | 101 | 47 | 56 | 91 | 111 | 50 |
| Link Distance (ft) | 893 | 893 |  | 569 | 569 | 386 | 386 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | B43 | WB | WB | WB | WB | NB | NB | NB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | T | T | L | T | T | R | L | L | TR |
| Maximum Queue (ft) | 42 | 129 | 262 | 38 | 110 | 55 | 86 | 75 | 22 | 205 | 255 | 67 |
| Average Queue (ft) | 5 | 53 | 60 | 1 | 5 | 22 | 36 | 33 | 2 | 108 | 129 | 21 |
| 95th Queue (ft) | 23 | 101 | 210 | 27 | 52 | 51 | 73 | 66 | 14 | 185 | 213 | 49 |
| Link Distance (ft) |  | 1589 | 1589 | 216 | 216 |  | 2037 | 2037 |  |  | 209 | 209 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) |  |  |  |  | 1 |  |  |  |  | 0 | 4 |  |
| Storage Bay Dist (ft) | 125 |  |  |  |  | 500 |  |  | 175 | 275 |  |  |
| Storage BIk Time (\%) |  | 0 |  |  |  |  |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  |  |  |  |  | 4 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | B81 | SB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | T | L | TR |
| Maximum Queue (ft) | 57 | 30 | 37 |
| Average Queue (ft) | 3 | 6 | 7 |
| 95th Queue (ft) | 33 | 23 | 26 |
| Link Distance (ft) | 189 |  | 278 |
| Upstream Blk Time (\%) | 0 |  |  |
| Queuing Penalty (veh) | 0 |  |  |
| Storage Bay Dist (ft) |  | 50 |  |
| Storage Blk Time (\%) |  | 0 | 0 |
| Queuing Penalty (veh) |  | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 76 | 75 | 125 | 41 | 70 | 55 | 58 | 107 | 57 | 89 |
| Average Queue (ft) | 22 | 10 | 27 | 6 | 21 | 10 | 12 | 46 | 18 | 32 |
| 95th Queue (ft) | 58 | 42 | 85 | 26 | 55 | 36 | 41 | 92 | 44 | 73 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 893 | 893 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 | 200 |  |  |  | 200 |  |
| Storage Bay Dist (ft) | 200 |  |  |  |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |

## Zone Summary

[^2]Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 89 | 56 | 150 | 134 | 101 | 112 | 168 | 188 | 209 | 73 | 107 | 106 |
| Average Queue (ft) | 37 | 21 | 66 | 60 | 31 | 60 | 54 | 78 | 68 | 30 | 43 | 36 |
| 95th Queue (ft) | 70 | 48 | 118 | 115 | 81 | 98 | 127 | 146 | 146 | 62 | 87 | 81 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 248 | 243 | 155 | 109 | 137 | 149 | 362 | 281 | 189 | 165 |
| Average Queue (ft) | 152 | 148 | 77 | 28 | 125 | 136 | 138 | 58 | 85 | 65 |
| 95th Queue (ft) | 229 | 223 | 130 | 70 | 158 | 166 | 345 | 182 | 159 | 132 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 1 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  | 1 | 11 | 0 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 5 | 36 | 0 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 131 | 176 | 161 | 169 | 166 | 106 | 89 | 99 | 145 | 150 |
| Average Queue (ft) | 39 | 103 | 73 | 138 | 113 | 20 | 33 | 58 | 35 | 49 |
| 95th Queue (ft) | 88 | 158 | 134 | 199 | 188 | 69 | 74 | 89 | 102 | 120 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 14 | 6 | 0 |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 53 | 22 | 0 |  |  |  |  |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  | 0 |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | R | L | T | T | T | T | R |
| Maximum Queue (ft) | 69 | 180 | 61 | 82 | 305 | 213 | 162 | 167 | 82 |
| Average Queue (ft) | 10 | 67 | 19 | 16 | 120 | 53 | 102 | 110 | 4 |
| 95th Queue (ft) | 42 | 138 | 47 | 54 | 258 | 152 | 184 | 184 | 41 |
| Link Distance (ft) |  | 633 |  |  | 1547 | 1547 | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 7 | 8 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  | 43 | 53 | 0 |
| Storage Bay Dist (ft) | 200 |  | 200 | 150 |  |  |  |  | 200 |
| Storage Blk Time (\%) |  | 0 |  |  | 6 | 0 |  | 8 | 0 |
| Queuing Penalty (veh) |  | 0 |  |  | 1 | 0 |  | 4 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | NB | NB | B25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | L | T | R | L | T | R | L | T | T | R | T |
| Maximum Queue (ft) | 178 | 189 | 124 | 50 | 107 | 114 | 5 | 227 | 378 | 383 | 175 | 64 |
| Average Queue (ft) | 78 | 98 | 52 | 20 | 48 | 46 | 0 | 46 | 207 | 212 | 35 | 3 |
| 95th Queue (ft) | 155 | 165 | 105 | 45 | 92 | 92 | 5 | 139 | 362 | 378 | 146 | 31 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  |  | 317 | 317 |  | 652 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  | 3 | 3 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 15 | 17 |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 175 | 250 |  |  | 150 |  |
| Storage Blk Time (\%) | 0 | 0 | 0 |  |  |  |  |  | 7 | 18 | 0 |  |
| Queuing Penalty (veh) | 0 | 0 | 0 |  |  |  |  |  | 4 | 11 | 0 |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | B25 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | T | L | T | T | R |
| Maximum Queue (ft) | 62 | 321 | 403 | 369 | 175 |
| Average Queue (ft) | 4 | 240 | 219 | 179 | 78 |
| 95th Queue (ft) | 37 | 372 | 455 | 339 | 187 |
| Link Distance (ft) | 652 |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  |  | 16 | 1 |  |
| Queuing Penalty (veh) |  |  | 113 | 5 |  |
| Storage Bay Dist (ft) |  | 300 |  |  | 150 |
| Storage Blk Time (\%) |  | 24 | 2 | 8 | 0 |
| Queuing Penalty (veh) |  | 94 | 5 | 20 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 50 | 117 | 130 | 286 | 290 | 119 | 155 | 177 | 375 | 464 | 18 |
| Average Queue (ft) | 17 | 49 | 33 | 164 | 183 | 10 | 13 | 63 | 102 | 192 | 2 |
| 95th Queue (ft) | 42 | 95 | 90 | 280 | 295 | 72 | 86 | 132 | 268 | 396 | 12 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 |  |
| Upstream Blk Time (\%) |  |  |  | 4 | 6 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 24 | 40 |  |  |  |  |  | 500 |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  | 3 | 0 |
| Storage Blk Time (\%) |  |  |  | 8 |  |  |  | 0 | 2 | 0 |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | NB | SB | SB | B81 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L | TR | T |
| Maximum Queue (ft) | 30 | 100 | 31 | 23 | 91 | 15 | 2 |
| Average Queue (ft) | 5 | 38 | 2 | 2 | 39 | 0 | 0 |
| 95th Queue (ft) | 24 | 73 | 16 | 12 | 75 | 0 | 2 |
| Link Distance (ft) | 158 | 1439 |  | 558 |  | 172 | 225 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 200 |  | 190 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 320 | 105 | 239 | 518 |
| Average Queue (ft) | 108 | 58 | 83 | 206 |
| 95th Queue (ft) | 239 | 103 | 162 | 506 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) |  |  |  | 8 |
| Queuing Penalty (veh) |  |  |  | 0 |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 1 | 7 |  |
| Queuing Penalty (veh) |  | 3 | 11 |  |

Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 140 | 13 | 319 |
| Average Queue (ft) | 53 | 0 | 84 |
| 95th Queue (ft) | 112 | 6 | 250 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T |
| Maximum Queue (ft) | 212 | 225 | 621 | 292 | 217 | 136 | 94 | 3 |
| Average Queue (ft) | 158 | 148 | 248 | 130 | 80 | 63 | 33 | 0 |
| 95th Queue (ft) | 248 | 276 | 665 | 226 | 164 | 120 | 73 | 3 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 |
| Upstream Blk Time (\%) |  |  | 6 |  |  | 1 | 0 |  |
| Queuing Penalty (veh) |  |  | 36 |  |  | 1 | 0 |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |
| Storage Blk Time (\%) | 24 | 23 | 0 | 1 | 0 |  |  |  |
| Queuing Penalty (veh) | 50 | 48 | 2 | 4 | 1 |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 130 | 2 | 52 |
| Average Queue (ft) | 13 | 0 | 14 |
| 95th Queue (ft) | 69 | 2 | 42 |
| Link Distance (ft) | 1506 | 1257 | 266 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | B60 | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | T | LT | R | L | TR |
| Maximum Queue (ft) | 145 | 138 | 94 | 120 | 567 | 195 | 43 | 162 | 90 | 124 | 99 |
| Average Queue (ft) | 65 | 73 | 29 | 21 | 285 | 139 | 4 | 73 | 19 | 56 | 41 |
| 95th Queue (ft) | 116 | 122 | 74 | 76 | 535 | 256 | 52 | 132 | 57 | 101 | 77 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 458 | 614 |  |  | 1686 |
| Upstream Blk Time (\%) |  |  |  |  | 1 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 12 |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  |  | 90 | 340 |  |
| Storage Blk Time (\%) | 0 | 0 |  |  | 28 | 0 |  | 6 | 0 |  |  |
| Queuing Penalty (veh) | 0 | 0 |  |  | 98 | 1 |  | 2 | 0 |  |  |

## Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | L | LTR | LTR |
| Maximum Queue (ft) | 47 | 24 | 59 | 68 |
| Average Queue (ft) | 14 | 1 | 23 | 31 |
| 95th Queue (ft) | 41 | 10 | 50 | 57 |
| Link Distance (ft) |  |  | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |
| Storage Bay Dist (ft) | 90 | 60 |  |  |
| Storage Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 31 | 57 |
| Average Queue (ft) | 11 | 7 |
| 95th Queue (ft) | 33 | 35 |
| Link Distance (ft) | 488 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB |
| :--- | ---: |
| Directions Served | R |
| Maximum Queue (ft) | 28 |
| Average Queue (ft) | 13 |
| 95th Queue (ft) | 35 |
| Link Distance (ft) | 621 |
| Upstream Blk Time (\%) |  |
| Queuing Penalty (veh) |  |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | L |
| Maximum Queue (ft) | 53 | 49 | 23 | 26 |
| Average Queue (ft) | 23 | 21 | 1 | 5 |
| 95th Queue (ft) | 45 | 46 | 11 | 22 |
| Link Distance (ft) | 602 | 1011 |  |  |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 200 | 100 |
| Storage Blk Time (\%) |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | EB | WB | WB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | R | L | TR | L | L | TR | L | T | R |
| Maximum Queue (ft) | 75 | 43 | 75 | 50 | 70 | 74 | 78 | 97 | 28 | 92 | 74 |
| Average Queue (ft) | 25 | 9 | 21 | 15 | 24 | 26 | 37 | 31 | 4 | 35 | 35 |
| 95th Queue (ft) | 58 | 31 | 51 | 42 | 58 | 59 | 66 | 72 | 19 | 73 | 61 |
| Link Distance (ft) |  | 894 | 894 | 561 | 561 |  |  | 558 |  | 388 | 388 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 250 |  |  |  |  | 350 | 350 |  | 100 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | WB | WB | WB | WB | NB | NB | NB | B81 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | T | L | T | T | $R$ | L | L | TR | T |
| Maximum Queue (ft) | 33 | 107 | 100 | 14 | 72 | 113 | 121 | 25 | 212 | 260 | 39 | 25 |
| Average Queue (ft) | 4 | 45 | 37 | 0 | 23 | 53 | 55 | 2 | 115 | 126 | 8 | 1 |
| 95th Queue (ft) | 22 | 88 | 81 | 9 | 55 | 98 | 106 | 11 | 189 | 213 | 29 | 15 |
| Link Distance (ft) |  | 1589 | 1589 | 216 |  | 2037 | 2037 |  |  | 225 | 225 | 172 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  | 0 | 1 |  |  |
| Queuing Penalty (veh) |  |  |  |  | 500 |  |  | 175 | 0 | 2 |  |  |
| Storage Bay Dist (ft) | 125 |  |  |  |  |  | 0 |  | 0 | 1 |  |  |
| Storage Blk Time (\%) |  | 0 |  |  |  |  | 0 |  | 0 | 2 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  |  |  |  |  |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | SB | SB |
| :--- | ---: | ---: |
| Directions Served | L | TR |
| Maximum Queue (ft) | 30 | 32 |
| Average Queue (ft) | 4 | 7 |
| 95th Queue (ft) | 18 | 26 |
| Link Distance (ft) |  | 278 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) | 50 |  |
| Storage Blk Time (\%) | 0 | 0 |
| Queuing Penalty (veh) | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 59 | 86 | 96 | 27 | 91 | 75 | 79 | 121 | 28 | 100 |
| Average Queue (ft) | 15 | 14 | 16 | 2 | 33 | 19 | 22 | 47 | 10 | 33 |
| 95th Queue (ft) | 43 | 54 | 59 | 15 | 76 | 57 | 61 | 100 | 31 | 77 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 894 | 894 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 200 |  |  | 200 | 200 |  |  |  | 200 |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |

Zone Summary
Zone wide Queuing Penalty: 848

Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 254 | 185 | 268 | 274 | 176 | 191 | 194 | 188 | 237 | 95 | 160 | 143 |
| Average Queue (ft) | 128 | 61 | 154 | 139 | 99 | 117 | 104 | 107 | 110 | 34 | 76 | 62 |
| 95th Queue (ft) | 216 | 138 | 233 | 241 | 168 | 177 | 184 | 168 | 196 | 75 | 137 | 121 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 |  |
| Storage Bay Dist (ft) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 466 | 378 | 222 | 154 | 137 | 149 | 297 | 180 | 294 | 272 |
| Average Queue (ft) | 212 | 190 | 103 | 37 | 112 | 125 | 99 | 63 | 163 | 144 |
| 95th Queue (ft) | 441 | 421 | 227 | 98 | 166 | 164 | 224 | 132 | 272 | 255 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) | 0 | 0 |  |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) | 0 | 0 |  |  |  |  | 0 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage BIk Time (\%) |  | 2 | 0 |  | 1 | 4 | 1 |  |  |  |
| Queuing Penalty (veh) |  | 9 | 0 |  | 3 | 15 | 3 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 307 | 391 | 360 | 168 | 168 | 80 | 161 | 174 | 391 | 396 |
| Average Queue (ft) | 117 | 196 | 171 | 162 | 132 | 14 | 100 | 129 | 167 | 181 |
| 95th Queue (ft) | 233 | 307 | 282 | 170 | 184 | 53 | 162 | 194 | 348 | 349 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 43 | 10 |  |  |  | 1 | 1 |
| Queuing Penalty (veh) |  |  |  | 162 | 39 |  |  |  | 9 | 8 |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  | 1 | 4 | 10 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 6 | 26 | 34 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | EB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | R | L | T | T | R | T | T | R |
| Maximum Queue (ft) | 39 | 128 | 76 | 175 | 721 | 671 | 106 | 168 | 169 | 135 |
| Average Queue (ft) | 5 | 59 | 28 | 86 | 483 | 369 | 5 | 132 | 134 | 10 |
| 95th Queue (ft) | 24 | 111 | 62 | 202 | 793 | 698 | 63 | 190 | 181 | 66 |
| Link Distance (ft) |  | 633 |  |  | 1533 | 1533 |  | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 12 | 13 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 115 | 124 | 0 |
| Storage Bay Dist (ft) | 200 |  | 200 | 150 |  |  | 250 |  |  | 200 |
| Storage Blk Time (\%) |  | 0 |  | 0 | 54 | 1 | 0 |  | 13 | 0 |
| Queuing Penalty (veh) |  | 0 |  | 2 | 25 | 3 | 0 |  | 9 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T | T |
| Maximum Queue (ft) | 207 | 220 | 890 | 75 | 53 | 76 | 249 | 372 | 375 | 140 | 66 | 80 |
| Average Queue (ft) | 194 | 208 | 418 | 33 | 15 | 30 | 70 | 167 | 180 | 12 | 4 | 7 |
| 95th Queue (ft) | 239 | 246 | 987 | 65 | 43 | 68 | 175 | 359 | 376 | 82 | 46 | 56 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  | 317 | 317 |  | 652 | 652 |
| Upstream Blk Time (\%) |  |  | 2 |  |  |  |  | 3 | 4 |  |  |  |
| Queuing Penalty (veh) |  |  | 0 |  |  |  |  | 15 | 19 |  |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 250 |  |  | 150 |  |  |
| Storage Blk Time (\%) | 7 | 39 |  |  |  |  |  | 5 | 14 | 0 |  |  |
| Queuing Penalty (veh) | 10 | 53 |  |  |  |  |  | 4 | 3 | 0 |  |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 302 | 386 | 393 | 175 |
| Average Queue (ft) | 146 | 286 | 343 | 147 |
| 95th Queue (ft) | 286 | 439 | 452 | 235 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 4 | 13 |  |
| Queuing Penalty (veh) |  | 38 | 125 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 0 | 8 | 30 | 1 |
| Queuing Penalty (veh) | 1 | 13 | 124 | 3 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 136 | 226 | 174 | 292 | 297 | 170 | 184 | 200 | 661 | 701 | 276 |
| Average Queue (ft) | 65 | 135 | 99 | 184 | 201 | 13 | 15 | 83 | 329 | 441 | 23 |
| 95th Queue (ft) | 119 | 213 | 184 | 301 | 312 | 93 | 99 | 174 | 673 | 750 | 190 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 | 107 |
| Upstream Blk Time (\%) | 0 |  |  | 8 | 9 |  |  |  | 1 | 5 | 317 |
| Queuing Penalty (veh) | 0 |  |  | 43 | 49 |  |  |  | 10 | 33 | 0 |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  | 1 | 500 |
| Storage Blk Time (\%) |  |  | 7 | 13 |  |  |  | 2 | 15 | 14 | 0 |
| Queuing Penalty (veh) |  |  | 34 | 11 |  |  |  | 12 | 11 | 1 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | B25 | B25 |
| :--- | ---: | ---: |
| Directions Served | T |  |
| Maximum Queue (ft) | 209 | 32 |
| Average Queue (ft) | 22 | 1 |
| 95th Queue (ft) | 147 | 33 |
| Link Distance (ft) | 317 | 317 |
| Upstream Blk Time (\%) | 0 | 0 |
| Queuing Penalty (veh) | 2 | 0 |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | TR | L | TR |
| Maximum Queue (ft) | 34 | 128 | 9 | 67 | 18 |
| Average Queue (ft) | 4 | 55 | 0 | 25 | 1 |
| 95th Queue (ft) | 23 | 102 | 6 | 55 | 19 |
| Link Distance (ft) | 158 | 1438 | 558 |  | 189 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |
| Queuing Penalty (veh) |  |  |  |  | 0 |
| Storage Bay Dist (ft) |  |  |  | 150 |  |
| Storage Blk Time (\%) |  |  |  |  | 0 |
| Queuing Penalty (veh) |  |  |  |  | 0 |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 747 | 103 | 150 | 155 |
| Average Queue (ft) | 290 | 58 | 63 | 66 |
| 95th Queue (ft) | 726 | 95 | 111 | 115 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) | 9 |  |  |  |
| Queuing Penalty (veh) | 0 |  |  |  |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 2 | 2 |  |
| Queuing Penalty (veh) |  | 7 | 5 |  |

## Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 174 | 11 | 137 |
| Average Queue (ft) | 44 | 0 | 45 |
| 95th Queue (ft) | 122 | 6 | 102 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T | T |
| Maximum Queue (ft) | 207 | 218 | 515 | 224 | 168 | 202 | 134 | 138 | 3 |
| Average Queue (ft) | 150 | 88 | 203 | 112 | 51 | 154 | 54 | 21 | 0 |
| 95th Queue (ft) | 231 | 253 | 514 | 186 | 115 | 223 | 106 | 90 | 3 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 | 419 |
| Upstream Blk Time (\%) |  |  | 2 |  |  | 16 | 0 |  |  |
| Queuing Penalty (veh) |  |  | 14 |  |  | 75 | 1 |  |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |  |
| Storage Blk Time (\%) | 20 | 14 | 1 | 0 | 0 |  |  |  |  |
| Queuing Penalty (veh) | 66 | 47 | 4 | 1 | 0 |  |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 168 | 51 |
| Average Queue (ft) | 17 | 19 |
| 95th Queue (ft) | 91 | 47 |
| Link Distance (ft) | 1506 | 266 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | LT | R | L | TR |
| Maximum Queue (ft) | 204 | 325 | 274 | 130 | 420 | 195 | 160 | 108 | 254 | 153 |
| Average Queue (ft) | 81 | 160 | 101 | 44 | 179 | 75 | 71 | 32 | 139 | 56 |
| 95th Queue (ft) | 167 | 259 | 210 | 109 | 341 | 191 | 126 | 77 | 222 | 118 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 614 |  | 1686 |  |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 1 |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  | 90 | 340 |  |
| Storage Blk Time (\%) | 0 | 5 | 0 | 0 | 20 | 0 | 6 | 0 |  | 0 |
| Queuing Penalty (veh) | 2 | 25 | 1 | 1 | 48 | 0 | 3 | 0 | 0 |  |

Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | B60 | WB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | T | L | TR | LTR | LTR |
| Maximum Queue (ft) | 64 | 22 | 56 | 44 | 2 | 117 | 83 |
| Average Queue (ft) | 22 | 1 | 2 | 12 | 0 | 44 | 37 |
| 95th Queue (ft) | 51 | 10 | 57 | 38 | 2 | 89 | 66 |
| Link Distance (ft) |  | 458 | 549 |  | 2746 | 122 | 679 |
| Upstream Blk Time (\%) |  |  | 0 |  |  | 1 |  |
| Queuing Penalty (veh) |  |  | 0 |  |  | 0 |  |
| Storage Bay Dist (ft) | 90 |  |  | 60 |  |  |  |
| Storage Blk Time (\%) | 0 | 0 |  | 0 |  |  |  |
| Queuing Penalty (veh) | 0 | 0 |  | 0 |  |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 50 | 46 |
| Average Queue (ft) | 23 | 5 |
| 95th Queue (ft) | 45 | 29 |
| Link Distance (ft) | 488 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB |
| :--- | ---: |
| Directions Served | R |
| Maximum Queue (ft) | 52 |
| Average Queue (ft) | 19 |
| 95th Queue (ft) | 44 |
| Link Distance (ft) | 621 |
| Upstream Blk Time (\%) |  |
| Queuing Penalty (veh) |  |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | L | TR |
| Maximum Queue (ft) | 64 | 52 | 32 | 40 | 1 |
| Average Queue (ft) | 28 | 22 | 7 | 8 | 0 |
| 95th Queue (ft) | 54 | 47 | 28 | 28 | 1 |
| Link Distance (ft) | 606 | 1004 |  |  | 558 |
| Upstream Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | EB | WB | WB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | R | L | TR | L | L | TR | L | T | R |
| Maximum Queue (ft) | 89 | 50 | 163 | 60 | 87 | 60 | 66 | 136 | 46 | 159 | 63 |
| Average Queue (ft) | 32 | 11 | 56 | 24 | 38 | 23 | 32 | 55 | 5 | 72 | 26 |
| 95th Queue (ft) | 69 | 35 | 120 | 55 | 74 | 52 | 61 | 110 | 20 | 132 | 50 |
| Link Distance (ft) |  | 894 | 894 |  | 562 |  | 558 | 558 |  | 388 | 388 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 |  | 350 |  |  | 100 |  |  |
| Storage Bay Dist (ft) | 250 |  |  |  |  |  |  |  |  | 2 |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | B43 | WB | WB | WB | WB | NB | NB | NB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | T | T | L | T | T | R | L | L | TR |
| Maximum Queue (ft) | 41 | 136 | 136 | 6 | 70 | 58 | 102 | 101 | 22 | 205 | 261 | 50 |
| Average Queue (ft) | 4 | 63 | 59 | 0 | 4 | 22 | 45 | 43 | 3 | 111 | 126 | 20 |
| 95th Queue (ft) | 21 | 110 | 107 | 6 | 34 | 50 | 86 | 83 | 15 | 186 | 210 | 45 |
| Link Distance (ft) |  | 1589 | 1589 | 216 | 216 |  | 2037 | 2037 |  |  | 209 | 209 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) |  |  |  |  | 0 |  |  |  |  | 0 | 4 |  |
| Storage Bay Dist (ft) | 125 |  |  |  |  | 500 |  |  | 175 | 275 |  |  |
| Storage BIk Time (\%) |  | 0 |  |  |  |  |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  |  |  |  | 1 | 4 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | B81 | SB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | T | L | TR |
| Maximum Queue (ft) | 53 | 35 | 32 |
| Average Queue (ft) | 3 | 5 | 7 |
| 95th Queue (ft) | 29 | 22 | 25 |
| Link Distance (ft) | 189 |  | 278 |
| Upstream Blk Time (\%) | 0 |  |  |
| Queuing Penalty (veh) | 0 |  |  |
| Storage Bay Dist (ft) |  | 50 |  |
| Storage Blk Time (\%) |  | 0 | 0 |
| Queuing Penalty (veh) |  | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 75 | 120 | 161 | 58 | 77 | 68 | 71 | 143 | 64 | 81 |
| Average Queue (ft) | 26 | 15 | 29 | 5 | 23 | 18 | 19 | 50 | 20 | 31 |
| 95th Queue (ft) | 61 | 66 | 98 | 34 | 61 | 53 | 53 | 109 | 47 | 69 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 894 | 894 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 | 200 |  |  | 0 | 200 |  |
| Storage Bay Dist (ft) | 200 |  | 0 |  |  |  |  | 0 |  |  |
| Storage Blk Time (\%) |  |  | 0 |  |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  |  | 0 |  |  |  |  |  |  |  |

## Zone Summary

[^3]Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 90 | 56 | 145 | 138 | 116 | 118 | 147 | 159 | 173 | 89 | 125 | 133 |
| Average Queue (ft) | 38 | 24 | 60 | 66 | 39 | 67 | 62 | 81 | 72 | 30 | 51 | 47 |
| 95th Queue (ft) | 71 | 51 | 111 | 118 | 92 | 104 | 129 | 141 | 138 | 67 | 102 | 103 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |  |  |  | 0 | 0 |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 201 | 202 | 182 | 140 | 137 | 149 | 394 | 316 | 185 | 162 |
| Average Queue (ft) | 126 | 120 | 90 | 36 | 124 | 135 | 168 | 66 | 86 | 71 |
| 95th Queue (ft) | 185 | 184 | 152 | 94 | 162 | 168 | 400 | 198 | 156 | 135 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 2 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 11 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  | 2 | 13 | 0 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 6 | 49 | 1 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 145 | 200 | 201 | 173 | 170 | 63 | 96 | 109 | 108 | 130 |
| Average Queue (ft) | 50 | 113 | 90 | 146 | 123 | 7 | 34 | 61 | 28 | 39 |
| 95th Queue (ft) | 113 | 177 | 161 | 195 | 192 | 35 | 77 | 94 | 80 | 99 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 19 | 7 |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 76 | 30 |  |  |  |  |  |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  | 0 |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | T | T | T | T | R |
| Maximum Queue (ft) | 120 | 67 | 87 | 400 | 251 | 161 | 172 | 55 |
| Average Queue (ft) | 41 | 18 | 8 | 147 | 63 | 82 | 95 | 2 |
| 95th Queue (ft) | 93 | 48 | 44 | 344 | 188 | 178 | 191 | 29 |
| Link Distance (ft) | 633 |  |  | 1547 | 1547 | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  | 4 | 5 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  | 24 | 36 | 0 |
| Storage Bay Dist (ft) |  | 200 | 150 |  |  |  |  | 200 |
| Storage Blk Time (\%) |  |  |  | 10 | 0 |  | 5 | 0 |
| Queuing Penalty (veh) |  |  |  | 1 | 0 |  | 1 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | NB | NB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | L | L | T | R | L | T | R | L | T | T | R |
| T |  |  |  |  |  |  |  |  |  |  |  |
| Maximum Queue (ft) | 200 | 209 | 219 | 68 | 138 | 128 | 20 | 274 | 380 | 390 | 175 |
| Average Queue (ft) | 93 | 116 | 57 | 22 | 50 | 53 | 1 | 64 | 221 | 224 | 33 |
| 95th Queue (ft) | 176 | 186 | 144 | 53 | 104 | 104 | 20 | 184 | 391 | 403 | 143 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  |  | 317 | 317 | 58 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  | 4 | 5 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 24 | 28 |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 175 | 250 |  |  | 150 |
| Storage Blk Time (\%) | 0 | 1 | 0 |  | 0 | 0 |  | 0 | 8 | 18 | 0 |
| Queuing Penalty (veh) | 0 | 1 | 1 |  | 0 | 0 |  | 0 | 5 | 11 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | B25 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | T | L | T | T | R |
| Maximum Queue (ft) | 96 | 320 | 381 | 378 | 175 |
| Average Queue (ft) | 10 | 220 | 203 | 199 | 100 |
| 95th Queue (ft) | 64 | 353 | 402 | 353 | 208 |
| Link Distance (ft) | 652 |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  |  | 8 | 1 |  |
| Queuing Penalty (veh) |  |  | 56 | 5 |  |
| Storage Bay Dist (ft) |  | 300 |  |  | 150 |
| Storage Blk Time (\%) |  | 13 | 2 | 11 | 0 |
| Queuing Penalty (veh) |  | 54 | 4 | 32 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R | T |
| Maximum Queue (ft) | 75 | 139 | 174 | 298 | 298 | 199 | 226 | 195 | 544 | 586 | 68 | 5 |
| Average Queue (ft) | 28 | 55 | 65 | 206 | 224 | 28 | 36 | 88 | 160 | 243 | 4 | 0 |
| 95th Queue (ft) | 63 | 110 | 149 | 324 | 333 | 125 | 142 | 176 | 405 | 490 | 56 | 5 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 |  | 317 |
| Upstream Blk Time (\%) |  |  |  | 9 | 12 |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  | 64 | 83 |  |  |  | 0 | 1 |  |  |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  |  | 500 |  |
| Storage Blk Time (\%) |  |  | 0 | 15 |  |  |  | 3 | 6 | 2 |  |  |
| Queuing Penalty (veh) |  |  | 2 | 9 |  |  |  | 11 | 6 | 0 |  |  |

## Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | NB | SB | SB | B81 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L | TR | T |
| Maximum Queue (ft) | 32 | 63 | 30 | 48 | 81 | 19 | 43 |
| Average Queue (ft) | 6 | 26 | 2 | 4 | 35 | 1 | 2 |
| 95th Queue (ft) | 25 | 54 | 15 | 27 | 66 | 20 | 31 |
| Link Distance (ft) | 158 | 1438 |  | 558 |  | 172 | 225 |
| Upstream Blk Time (\%) |  |  |  |  |  | 0 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  | 0 | 0 |
| Storage Bay Dist (ft) |  |  | 200 |  | 190 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  | 0 |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 500 | 105 | 210 | 617 |
| Average Queue (ft) | 179 | 62 | 91 | 305 |
| 95th Queue (ft) | 472 | 109 | 174 | 665 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) | 2 |  | 0 | 25 |
| Queuing Penalty (veh) | 0 |  | 0 | 0 |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 1 | 11 |  |
| Queuing Penalty (veh) |  | 5 | 18 |  |

Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 191 | 13 | 295 |
| Average Queue (ft) | 61 | 1 | 78 |
| 95th Queue (ft) | 137 | 7 | 222 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R |
| Maximum Queue (ft) | 212 | 225 | 659 | 234 | 192 | 141 | 117 |
| Average Queue (ft) | 183 | 181 | 392 | 120 | 66 | 61 | 37 |
| 95th Queue (ft) | 254 | 291 | 839 | 190 | 127 | 117 | 82 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 |
| Upstream Blk Time (\%) |  |  | 12 |  |  | 1 | 0 |
| Queuing Penalty (veh) |  |  | 72 |  |  | 1 | 0 |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |
| Storage Blk Time (\%) | 38 | 40 | 1 | 0 | 0 |  |  |
| Queuing Penalty (veh) | 79 | 82 | 4 | 2 | 0 |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 137 | 4 | 44 |
| Average Queue (ft) | 14 | 0 | 13 |
| 95th Queue (ft) | 72 | 4 | 39 |
| Link Distance (ft) | 1506 | 1257 | 266 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | LT | R | L | TR |
| Maximum Queue (ft) | 122 | 156 | 103 | 109 | 441 | 195 | 141 | 79 | 164 | 90 |
| Average Queue (ft) | 52 | 74 | 29 | 21 | 194 | 121 | 64 | 22 | 72 | 31 |
| 95th Queue (ft) | 99 | 129 | 75 | 74 | 367 | 228 | 118 | 58 | 132 | 69 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 614 |  |  | 1686 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 0 |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  | 90 | 340 |  |
| Storage Blk Time (\%) |  | 0 |  |  | 18 | 0 | 3 | 0 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  | 84 | 2 | 1 | 0 |  |  |

## Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | L | LTR | LTR |
| Maximum Queue (ft) | 48 | 2 | 20 | 65 | 78 |
| Average Queue (ft) | 14 | 0 | 1 | 25 | 34 |
| 95th Queue (ft) | 40 | 0 | 10 | 55 | 65 |
| Link Distance (ft) |  | 458 |  | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 60 |  |  |
| Storage Bay Dist (ft) | 90 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LR | LT | TR |
| Maximum Queue (ft) | 37 | 60 | 2 |
| Average Queue (ft) | 15 | 9 | 0 |
| 95th Queue (ft) | 39 | 38 | 2 |
| Link Distance (ft) | 488 | 395 | 1146 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | R | TR |
| Maximum Queue (ft) | 33 | 112 |
| Average Queue (ft) | 14 | 10 |
| 95th Queue (ft) | 36 | 63 |
| Link Distance (ft) | 627 | 395 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | R | $R$ | L | L |
| Maximum Queue (ft) | 53 | 61 | 24 | 40 |
| Average Queue (ft) | 25 | 26 | 1 | 9 |
| 95th Queue (ft) | 45 | 50 | 11 | 31 |
| Link Distance (ft) | 602 | 1011 |  |  |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  | 200 | 100 |
| Storage Bay Dist (ft) |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | L | T | T | R |
| Maximum Queue (ft) | 115 | 96 | 267 | 260 | 280 | 394 | 123 |
| Average Queue (ft) | 37 | 25 | 157 | 149 | 132 | 317 | 49 |
| 95th Queue (ft) | 86 | 66 | 236 | 233 | 238 | 410 | 94 |
| Link Distance (ft) | 893 | 893 |  |  | 570 | 386 | 386 |
| Upstream Blk Time (\%) |  |  |  |  |  | 3 |  |
| Queuing Penalty (veh) |  |  | 350 | 350 |  | 4 |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | WB | WB | WB | WB | NB | NB | NB | B81 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | T | L | T | T | R | L | L | TR | T |
| Maximum Queue (ft) | 44 | 121 | 111 | 56 | 122 | 193 | 201 | 62 | 225 | 290 | 58 | 109 |
| Average Queue (ft) | 10 | 48 | 44 | 2 | 43 | 75 | 82 | 5 | 128 | 140 | 15 | 6 |
| 95th Queue (ft) | 33 | 98 | 94 | 33 | 93 | 154 | 163 | 35 | 207 | 233 | 42 | 57 |
| Link Distance (ft) |  | 1589 | 1589 | 216 |  | 2037 | 2037 |  |  | 225 | 225 | 172 |
| Upstream Blk Time (\%) |  |  |  | 0 |  |  |  |  | 0 | 1 |  | 0 |
| Queuing Penalty (veh) |  |  |  | 0 |  |  |  |  | 0 | 4 |  | 1 |
| Storage Bay Dist (ft) | 125 |  |  |  | 500 |  |  | 175 | 275 |  |  |  |
| Storage Blk Time (\%) |  | 0 |  |  |  |  | 1 | 0 | 0 | 1 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  | 0 | 0 | 1 | 4 |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | SB | SB |
| :--- | ---: | ---: |
| Directions Served | L | TR |
| Maximum Queue (ft) | 34 | 51 |
| Average Queue (ft) | 8 | 12 |
| 95th Queue (ft) | 28 | 36 |
| Link Distance (ft) |  | 278 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) | 50 |  |
| Storage Blk Time (\%) | 0 | 1 |
| Queuing Penalty (veh) | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 93 | 81 | 94 | 43 | 132 | 234 | 226 | 157 | 56 | 115 |
| Average Queue (ft) | 29 | 16 | 16 | 5 | 44 | 53 | 62 | 73 | 18 | 47 |
| 95th Queue (ft) | 72 | 54 | 57 | 25 | 98 | 158 | 168 | 132 | 45 | 95 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 893 | 893 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  | 200 |
| Storage Bay Dist (ft) | 200 |  |  |  |  |  | 0 |  | 0 |  |
| Storage Blk Time (\%) |  |  |  |  |  | 0 |  | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |

## Zone Summary

Zone wide Queuing Penalty: 999

Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 226 | 180 | 235 | 246 | 191 | 206 | 207 | 201 | 254 | 106 | 169 | 142 |
| Average Queue (ft) | 123 | 66 | 134 | 137 | 100 | 119 | 104 | 104 | 108 | 33 | 76 | 67 |
| 95th Queue (ft) | 203 | 136 | 211 | 222 | 167 | 174 | 186 | 170 | 195 | 76 | 135 | 124 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 | 0 |
| Queuing Penalty (veh) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |  |  |  |  | 1 |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 339 | 437 | 244 | 158 | 137 | 148 | 326 | 179 | 305 | 260 |
| Average Queue (ft) | 182 | 192 | 109 | 41 | 115 | 125 | 116 | 68 | 168 | 138 |
| 95th Queue (ft) | 304 | 347 | 217 | 110 | 163 | 164 | 264 | 133 | 271 | 230 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  | 0 |  |  |  |  | 0 | 0 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  | 1 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  | 1 | 0 |  | 1 | 4 | 1 |  |  |  |
| Queuing Penalty (veh) |  | 2 | 0 |  | 3 | 18 | 5 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 281 | 349 | 337 | 167 | 163 | 32 | 161 | 174 | 376 | 383 |
| Average Queue (ft) | 109 | 182 | 180 | 158 | 132 | 2 | 95 | 124 | 140 | 148 |
| 95th Queue (ft) | 223 | 293 | 300 | 178 | 187 | 15 | 166 | 187 | 326 | 325 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 37 | 11 |  |  |  | 0 | 0 |
| Queuing Penalty (veh) |  |  |  | 147 | 42 |  |  |  | 2 | 2 |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  | 0 | 3 | 6 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 3 | 20 | 20 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | T | T | R | T | T | R |
| Maximum Queue (ft) | 80 | 74 | 175 | 532 | 403 | 80 | 161 | 177 | 68 |
| Average Queue (ft) | 19 | 26 | 51 | 251 | 80 | 3 | 100 | 110 | 4 |
| 95th Queue (ft) | 57 | 58 | 147 | 490 | 259 | 48 | 197 | 204 | 41 |
| Link Distance (ft) | 633 |  |  | 1533 | 1533 |  | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 8 | 9 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  | 75 | 89 | 0 |
| Storage Bay Dist (ft) |  | 200 | 150 |  |  | 250 |  |  | 200 |
| Storage Blk Time (\%) |  |  |  | 27 | 0 | 0 |  | 9 | 0 |
| Queuing Penalty (veh) |  |  |  | 10 | 0 | 0 |  | 2 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 321 | 386 | 396 | 175 |
| Average Queue (ft) | 164 | 273 | 326 | 151 |
| 95th Queue (ft) | 306 | 434 | 462 | 228 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 3 | 10 |  |
| Queuing Penalty (veh) |  | 29 | 95 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 0 | 8 | 26 | 1 |
| Queuing Penalty (veh) | 0 | 12 | 122 | 7 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 170 | 238 | 175 | 303 | 293 | 272 | 259 | 199 | 647 | 679 | 218 |
| Average Queue (ft) | 75 | 153 | 117 | 217 | 208 | 63 | 51 | 95 | 320 | 393 | 11 |
| 95th Queue (ft) | 144 | 231 | 203 | 338 | 324 | 273 | 231 | 194 | 616 | 684 | 125 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 | 41 |
| Upstream Blk Time (\%) | 1 |  |  | 21 | 10 |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) | 0 |  |  | 115 | 57 |  |  |  | 1 | 5 |  |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  |  | 500 |
| Storage Blk Time (\%) |  |  | 22 | 15 |  |  |  | 1 | 17 | 8 | 0 |
| Queuing Penalty (veh) |  |  | 104 | 15 |  |  |  | 6 | 12 | 1 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | B25 |
| :--- | ---: |
| Directions Served | T |
| Maximum Queue (ft) | 139 |
| Average Queue (ft) | 6 |
| 95th Queue (ft) | 74 |
| Link Distance (ft) | 317 |
| Upstream Blk Time (\%) | 0 |
| Queuing Penalty (veh) | 0 |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | R | R | L |
| Maximum Queue (ft) | 32 | 145 | 42 |
| Average Queue (ft) | 5 | 58 | 6 |
| 95th Queue (ft) | 23 | 110 | 26 |
| Link Distance (ft) | 145 | 1439 |  |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  | 150 |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 850 | 104 | 214 | 186 |
| Average Queue (ft) | 538 | 66 | 76 | 79 |
| 95th Queue (ft) | 1054 | 106 | 160 | 147 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) | 44 |  | 0 |  |
| Queuing Penalty (veh) | 0 |  | 0 |  |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 4 | 5 |  |
| Queuing Penalty (veh) |  | 15 | 13 |  |

## Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 196 | 17 | 262 |
| Average Queue (ft) | 50 | 1 | 65 |
| 95th Queue (ft) | 133 | 9 | 200 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) | 0 |  |  |
| Queuing Penalty (veh) | 0 |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T | T |
| Maximum Queue (ft) | 136 | 175 | 233 | 246 | 174 | 205 | 161 | 104 | 10 |
| Average Queue (ft) | 67 | 72 | 102 | 107 | 46 | 140 | 63 | 10 | 0 |
| 95th Queue (ft) | 112 | 135 | 186 | 187 | 106 | 212 | 123 | 55 | 6 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 | 419 |
| Upstream Blk Time (\%) |  |  |  |  |  | 10 | 1 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  | 50 | 3 |  |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |  |
| Storage Blk Time (\%) |  | 0 | 1 | 1 | 0 |  |  |  |  |
| Queuing Penalty (veh) |  | 0 | 2 | 2 | 0 |  |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 121 | 53 |
| Average Queue (ft) | 10 | 22 |
| 95th Queue (ft) | 64 | 49 |
| Link Distance (ft) | 1506 | 266 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | LT | R | L | TR |
| Maximum Queue (ft) | 195 | 268 | 240 | 130 | 419 | 195 | 169 | 115 | 316 | 176 |
| Average Queue (ft) | 72 | 156 | 99 | 57 | 181 | 88 | 70 | 38 | 175 | 46 |
| 95th Queue (ft) | 154 | 241 | 199 | 127 | 344 | 207 | 130 | 89 | 268 | 89 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 614 |  | 1686 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  | 90 | 340 |  |
| Storage Blk Time (\%) | 0 | 5 | 0 | 0 | 22 | 0 | 6 | 0 | 0 |  |
| Queuing Penalty (veh) | 0 | 19 | 0 | 2 | 68 | 0 | 4 | 0 | 0 |  |

Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | B60 | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | T | L | LTR | LTR |
| Maximum Queue (ft) | 65 | 13 | 48 | 40 | 112 | 90 |
| Average Queue (ft) | 26 | 1 | 2 | 13 | 50 | 40 |
| 95th Queue (ft) | 54 | 6 | 49 | 38 | 98 | 71 |
| Link Distance (ft) |  | 458 | 549 |  | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  |  | 2 |  |
| Queuing Penalty (veh) |  |  |  |  | 0 |  |
| Storage Bay Dist (ft) | 90 |  |  | 60 |  |  |
| Storage Blk Time (\%) | 0 |  |  | 0 |  |  |
| Queuing Penalty (veh) | 0 |  |  | 0 |  |  |

## Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | :---: | :---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 62 | 76 |
| Average Queue (ft) | 28 | 12 |
| 95th Queue (ft) | 51 | 47 |
| Link Distance (ft) | 488 | 395 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB |
| :--- | ---: |
| Directions Served | R |
| Maximum Queue (ft) | 45 |
| Average Queue (ft) | 16 |
| 95th Queue (ft) | 40 |
| Link Distance (ft) | 627 |
| Upstream Blk Time (\%) |  |
| Queuing Penalty (veh) |  |
| Storage Bay Dist (ft) |  |
| Storage Blk Time (\%) |  |
| Queuing Penalty (veh) |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L | TR |
| Maximum Queue (ft) | 30 | 64 | 27 | 2 | 45 | 1 |
| Average Queue (ft) | 11 | 28 | 3 | 0 | 15 | 0 |
| 95th Queue (ft) | 33 | 51 | 18 | 2 | 39 | 1 |
| Link Distance (ft) | 602 | 1011 |  | 1686 |  | 570 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 200 |  | 100 |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | L | T | T | R |
| Maximum Queue (ft) | 161 | 380 | 176 | 202 | 356 | 339 | 69 |
| Average Queue (ft) | 61 | 180 | 84 | 72 | 201 | 216 | 30 |
| 95th Queue (ft) | 133 | 339 | 144 | 138 | 322 | 314 | 55 |
| Link Distance (ft) | 893 | 893 |  |  | 570 | 386 | 386 |
| Upstream Blk Time (\%) |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  | 350 | 350 |  | 0 |  |
| Storage Bay Dist (ft) |  |  |  |  | 0 |  |  |
| Storage Blk Time (\%) |  |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | EB | B43 | WB | WB | WB | WB | NB | NB | NB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | T | L | T | T | R | L | L | TR |
| Maximum Queue (ft) | 75 | 214 | 221 | 108 | 92 | 86 | 109 | 112 | 22 | 264 | 275 | 95 |
| Average Queue (ft) | 11 | 95 | 95 | 4 | 5 | 34 | 47 | 44 | 3 | 132 | 146 | 35 |
| 95th Queue (ft) | 47 | 172 | 172 | 57 | 46 | 72 | 95 | 92 | 15 | 222 | 234 | 70 |
| Link Distance (ft) |  | 1589 | 1589 |  | 216 |  | 2033 | 2033 |  |  | 451 | 451 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 0 |  |  |  | 175 | 275 |  |  |
| Storage Bay Dist (ft) | 125 |  |  | 250 |  | 500 |  |  | 0 | 0 |  |  |
| Storage Blk Time (\%) |  | 3 | 0 | 0 |  |  |  |  | 1 | 1 |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | SB | SB |
| :--- | ---: | ---: |
| Directions Served | L | TR |
| Maximum Queue (ft) | 36 | 56 |
| Average Queue (ft) | 8 | 14 |
| 95th Queue (ft) | 27 | 39 |
| Link Distance (ft) |  | 278 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) | 50 |  |
| Storage Blk Time (\%) | 0 | 1 |
| Queuing Penalty (veh) | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 96 | 154 | 192 | 44 | 107 | 97 | 115 | 162 | 61 | 132 |
| Average Queue (ft) | 40 | 28 | 52 | 9 | 39 | 18 | 27 | 74 | 25 | 56 |
| 95th Queue (ft) | 85 | 95 | 140 | 32 | 85 | 66 | 82 | 135 | 51 | 111 |
| Link Distance (ft) |  | 2033 | 2033 |  |  | 893 | 893 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 | 200 |  |  | 0 | 200 |  |
| Storage Bay Dist (ft) | 200 |  | 0 |  |  |  |  | 0 |  |  |
| Storage Blk Time (\%) |  | 0 | 0 |  |  |  |  |  |  |  |

## Zone Summary

[^4]Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 80 | 57 | 132 | 170 | 109 | 122 | 163 | 176 | 180 | 77 | 126 | 159 |
| Average Queue (ft) | 39 | 24 | 60 | 67 | 39 | 69 | 64 | 84 | 71 | 29 | 50 | 52 |
| 95th Queue (ft) | 68 | 50 | 108 | 135 | 92 | 108 | 131 | 147 | 138 | 62 | 101 | 115 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Storage Bay Dist (ft) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 201 | 208 | 170 | 142 | 137 | 149 | 409 | 319 | 176 | 164 |
| Average Queue (ft) | 120 | 120 | 88 | 36 | 128 | 139 | 186 | 67 | 87 | 72 |
| 95th Queue (ft) | 187 | 192 | 147 | 93 | 159 | 166 | 405 | 196 | 157 | 140 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 1 | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 5 | 0 |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  | 1 | 14 | 0 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 5 | 52 | 0 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 158 | 208 | 195 | 166 | 172 | 73 | 105 | 122 | 150 | 183 |
| Average Queue (ft) | 50 | 116 | 93 | 150 | 127 | 9 | 35 | 62 | 34 | 46 |
| 95th Queue (ft) | 116 | 184 | 169 | 188 | 195 | 42 | 82 | 103 | 100 | 125 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 20 | 9 | 0 |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 82 | 35 | 0 |  |  |  |  |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  | 1 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 1 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | EB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | R | L | T | T | R | T | T | R |
| Maximum Queue (ft) | 5 | 116 | 58 | 116 | 408 | 305 | 110 | 158 | 176 | 67 |
| Average Queue (ft) | 0 | 44 | 18 | 12 | 173 | 73 | 4 | 89 | 100 | 2 |
| 95th Queue (ft) | 5 | 94 | 45 | 59 | 363 | 207 | 58 | 183 | 194 | 32 |
| Link Distance (ft) |  | 63 |  |  | 1547 | 1547 |  | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 5 | 6 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 31 | 44 | 0 |
| Storage Bay Dist (ft) | 200 |  | 200 | 150 |  |  | 250 |  |  | 200 |
| Storage Blk Time (\%) |  | 0 |  |  | 13 | 0 | 0 |  | 6 | 0 |
| Queuing Penalty (veh) |  | 0 |  |  | 1 | 1 | 0 |  | 1 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T | T |
| Maximum Queue (ft) | 197 | 200 | 183 | 84 | 118 | 120 | 274 | 396 | 400 | 175 | 160 | 167 |
| Average Queue (ft) | 94 | 113 | 55 | 23 | 53 | 52 | 74 | 249 | 251 | 38 | 17 | 18 |
| 95th Queue (ft) | 173 | 179 | 122 | 60 | 104 | 100 | 213 | 434 | 439 | 152 | 88 | 95 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  | 317 | 317 | 8 | 652 | 652 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 8 | 8 |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 48 | 51 |  |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 250 |  |  | 150 |  |  |
| Storage Blk Time (\%) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 | 22 | 0 |  |  |
| Queuing Penalty (veh) | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 8 | 13 | 0 |  |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 325 | 415 | 378 | 175 |
| Average Queue (ft) | 249 | 249 | 229 | 106 |
| 95th Queue (ft) | 374 | 459 | 397 | 217 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 14 | 2 |  |
| Queuing Penalty (veh) |  | 94 | 11 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 22 | 4 | 13 | 0 |
| Queuing Penalty (veh) | 95 | 9 | 39 | 1 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 76 | 136 | 174 | 301 | 294 | 208 | 218 | 195 | 485 | 558 | 67 |
| Average Queue (ft) | 29 | 63 | 63 | 205 | 223 | 28 | 32 | 92 | 159 | 253 | 4 |
| 95th Queue (ft) | 63 | 118 | 148 | 322 | 328 | 123 | 130 | 183 | 379 | 492 | 56 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 | 9 |
| Upstream Blk Time (\%) |  |  |  | 9 | 12 |  |  |  | 0 | 0 |  |
| Queuing Penalty (veh) |  |  |  | 65 | 87 |  |  |  | 0 | 1 |  |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  |  | 500 |
| Storage Blk Time (\%) |  |  | 0 | 15 |  |  |  | 1 | 8 | 1 |  |
| Queuing Penalty (veh) |  |  | 0 | 9 |  |  |  | 6 | 7 | 0 |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | NB | NB | SB | B81 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L | T |
| Maximum Queue (ft) | 32 | 76 | 27 | 30 | 84 | 27 |
| Average Queue (ft) | 5 | 27 | 3 | 2 | 36 | 1 |
| 95th Queue (ft) | 23 | 55 | 18 | 14 | 71 | 23 |
| Link Distance (ft) | 158 | 1439 |  | 558 |  | 225 |
| Upstream Blk Time (\%) |  |  |  |  |  | 0 |
| Queuing Penalty (veh) |  |  |  |  |  | 0 |
| Storage Bay Dist (ft) |  |  | 200 |  | 190 |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 328 | 104 | 213 | 616 |
| Average Queue (ft) | 127 | 59 | 87 | 301 |
| 95th Queue (ft) | 272 | 104 | 160 | 653 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) |  |  |  | 19 |
| Queuing Penalty (veh) |  |  |  | 0 |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 1 | 8 |  |
| Queuing Penalty (veh) |  | 4 | 14 |  |

Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 203 | 17 | 326 |
| Average Queue (ft) | 61 | 1 | 88 |
| 95th Queue (ft) | 141 | 7 | 258 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) | 0 |  |  |
| Queuing Penalty (veh) | 0 |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T |
| Maximum Queue (ft) | 212 | 225 | 674 | 267 | 212 | 153 | 117 | 3 |
| Average Queue (ft) | 195 | 200 | 468 | 127 | 75 | 66 | 38 | 0 |
| 95th Queue (ft) | 251 | 285 | 885 | 212 | 161 | 125 | 86 | 3 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 |
| Upstream Blk Time (\%) |  |  | 16 |  |  | 1 | 0 |  |
| Queuing Penalty (veh) |  |  | 102 |  |  | 2 | 0 |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |
| Storage Blk Time (\%) | 47 | 48 | 1 | 1 | 0 |  |  |  |
| Queuing Penalty (veh) | 100 | 101 | 3 | 4 | 0 |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 155 | 2 | 40 |
| Average Queue (ft) | 17 | 0 | 12 |
| 95th Queue (ft) | 90 | 2 | 38 |
| Link Distance (ft) | 1506 | 1257 | 266 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | B60 | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | TR | L | T | R | T | LT | R | L | TR |
| Maximum Queue (ft) | 146 | 159 | 108 | 119 | 580 | 195 | 67 | 150 | 96 | 169 | 98 |
| Average Queue (ft) | 60 | 76 | 28 | 19 | 225 | 121 | 5 | 64 | 25 | 77 | 35 |
| 95th Queue (ft) | 114 | 132 | 77 | 67 | 462 | 229 | 69 | 119 | 66 | 141 | 74 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 458 | 614 |  |  | 1686 |
| Upstream Blk Time (\%) |  |  |  |  | 1 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 11 |  |  |  | 90 | 340 |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  | 4 | 0 |  |  |
| Storage Blk Time (\%) | 0 | 0 |  |  | 20 | 1 |  | 4 | 0 | 0 |  |
| Queuing Penalty (veh) | 0 | 0 |  |  | 94 | 3 |  | 1 | 0 |  |  |

## Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | TR | LTR | LTR |
| Maximum Queue (ft) | 44 | 21 | 5 | 71 | 81 |
| Average Queue (ft) | 12 | 2 | 0 | 26 | 33 |
| 95th Queue (ft) | 38 | 13 | 4 | 58 | 66 |
| Link Distance (ft) |  |  | 2746 | 122 | 679 |
| Upstream Blk Time (\%) |  |  |  | 0 |  |
| Queuing Penalty (veh) |  |  |  | 0 |  |
| Storage Bay Dist (ft) | 90 | 60 |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 44 | 71 |
| Average Queue (ft) | 16 | 9 |
| 95th Queue (ft) | 41 | 40 |
| Link Distance (ft) | 488 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | R | TR |
| Maximum Queue (ft) | 31 | 99 |
| Average Queue (ft) | 13 | 11 |
| 95th Queue (ft) | 36 | 61 |
| Link Distance (ft) | 621 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | L |
| Maximum Queue (ft) | 63 | 60 | 15 | 51 |
| Average Queue (ft) | 27 | 27 | 1 | 11 |
| 95th Queue (ft) | 49 | 51 | 9 | 35 |
| Link Distance (ft) | 602 | 1011 |  |  |
| Upstream Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 200 | 100 |
| Storage Blk Time (\%) |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | EB | WB | WB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | R | L | TR | L | L | TR | L | T | R |
| Maximum Queue (ft) | 151 | 70 | 103 | 56 | 90 | 293 | 308 | 348 | 106 | 396 | 130 |
| Average Queue (ft) | 53 | 15 | 27 | 17 | 35 | 173 | 169 | 173 | 11 | 328 | 52 |
| 95th Queue (ft) | 118 | 46 | 71 | 48 | 75 | 253 | 261 | 297 | 57 | 415 | 99 |
| Link Distance (ft) |  | 894 | 894 |  | 562 |  |  | 558 |  | 388 | 388 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  | 3 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  | 5 |  |
| Storage Bay Dist (ft) | 250 |  |  | 200 |  | 350 | 350 |  | 100 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  | 0 |  | 77 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 1 |  | 7 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | B43 | WB | WB | WB | WB | NB | NB | NB | B81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | T | L | T | T | R | L | L | TR | T |
| Maximum Queue (ft) | 45 | 136 | 122 | 12 | 116 | 216 | 234 | 60 | 225 | 276 | 52 | 90 |
| Average Queue (ft) | 10 | 58 | 47 | 0 | 47 | 86 | 88 | 4 | 140 | 154 | 15 | 5 |
| 95th Queue (ft) | 33 | 111 | 100 | 7 | 94 | 176 | 183 | 34 | 217 | 248 | 41 | 50 |
| Link Distance (ft) |  | 1589 | 1589 | 216 |  | 2037 | 2037 |  |  | 225 | 225 | 172 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  | 0 | 1 |  | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  | 0 | 6 |  | 1 |
| Storage Bay Dist (ft) | 125 |  |  |  | 500 |  |  | 175 | 275 |  |  |  |
| Storage Blk Time (\%) |  | 0 |  |  |  |  | 1 |  | 0 | 1 |  |  |
| Queuing Penalty (veh) |  | 0 |  |  |  |  | 0 |  | 2 | 6 |  |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | SB | SB |
| :--- | ---: | ---: |
| Directions Served | L | TR |
| Maximum Queue (ft) | 32 | 40 |
| Average Queue (ft) | 10 | 12 |
| 95th Queue (ft) | 30 | 33 |
| Link Distance (ft) |  | 278 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) | 50 |  |
| Storage Blk Time (\%) | 0 | 0 |
| Queuing Penalty (veh) | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 80 | 113 | 96 | 39 | 95 | 68 | 80 | 170 | 69 | 129 |
| Average Queue (ft) | 26 | 22 | 20 | 5 | 42 | 16 | 25 | 74 | 17 | 50 |
| 95th Queue (ft) | 65 | 77 | 66 | 24 | 83 | 48 | 63 | 138 | 50 | 100 |
| Link Distance (ft) |  | 2037 | 2037 |  |  | 894 | 89 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 | 200 |  |  |  | 200 |  |
| Storage Bay Dist (ft) | 200 |  |  |  |  |  |  | 0 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |

Zone Summary
Zone wide Queuing Penalty: 1275

Intersection: 1: Missouri Flat Road \& Plaza Drive

| Movement | EB | EB | WB | WB | NB | NB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | LTR | R | L | LTR | L | L | T | T | R | L | T | TR |
| Maximum Queue (ft) | 217 | 166 | 260 | 276 | 181 | 186 | 204 | 219 | 242 | 100 | 164 | 160 |
| Average Queue (ft) | 122 | 63 | 142 | 147 | 100 | 117 | 106 | 109 | 108 | 36 | 79 | 73 |
| 95th Queue (ft) | 197 | 132 | 227 | 246 | 165 | 173 | 180 | 178 | 198 | 77 | 139 | 136 |
| Link Distance (ft) | 740 | 740 | 734 | 734 |  |  | 459 | 459 | 459 |  | 200 | 200 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  | 0 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  | 0 | 0 |
| Storage Bay Dist (ft) |  |  |  |  | 330 | 330 |  |  |  | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |  |  |  | 0 | 1 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  | 0 | 0 |  |

Intersection: 2: Missouri Flat Road \& WB Ramps

| Movement | WB | WB | WB | WB | NB | NB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LT | R | R | L | L | T | T | T | T |
| Maximum Queue (ft) | 364 | 382 | 224 | 162 | 137 | 148 | 292 | 160 | 311 | 288 |
| Average Queue (ft) | 187 | 193 | 103 | 42 | 116 | 127 | 107 | 68 | 169 | 144 |
| 95th Queue (ft) | 310 | 316 | 183 | 109 | 164 | 164 | 231 | 131 | 279 | 249 |
| Link Distance (ft) | 983 | 983 |  |  |  |  | 395 | 395 | 459 | 459 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 400 | 400 | 125 | 125 |  |  |  |  |
| Storage Blk Time (\%) |  | 0 | 0 |  | 1 | 4 | 1 |  |  |  |
| Queuing Penalty (veh) |  | 1 | 0 |  | 3 | 16 | 3 |  |  |  |

Intersection: 3: Missouri Flat Road \& EB Ramps

| Movement | EB | EB | EB | NB | NB | NB | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | LTR | R | T | T | R | L | L | T | T |
| Maximum Queue (ft) | 261 | 328 | 322 | 168 | 164 | 32 | 162 | 174 | 411 | 411 |
| Average Queue (ft) | 108 | 179 | 177 | 159 | 136 | 2 | 94 | 125 | 170 | 180 |
| 95th Queue (ft) | 210 | 278 | 279 | 175 | 186 | 15 | 162 | 190 | 363 | 365 |
| Link Distance (ft) |  | 1460 |  | 138 | 138 | 138 |  |  | 395 | 395 |
| Upstream Blk Time (\%) |  |  |  | 40 | 12 |  |  |  | 1 | 1 |
| Queuing Penalty (veh) |  |  |  | 165 | 49 |  |  |  | 4 | 6 |
| Storage Bay Dist (ft) | 700 |  | 550 |  |  |  | 150 | 150 |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  | 0 | 3 | 9 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  | 2 | 20 | 29 |  |

Intersection: 4: Missouri Flat Road \& Mother Lode Drive

| Movement | EB | EB | NB | NB | NB | NB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | R | L | T | T | R | T | T | R |
| Maximum Queue (ft) | 73 | 81 | 174 | 725 | 634 | 81 | 163 | 179 | 27 |
| Average Queue (ft) | 23 | 28 | 53 | 386 | 184 | 2 | 116 | 124 | 1 |
| 95th Queue (ft) | 58 | 65 | 149 | 851 | 604 | 40 | 199 | 204 | 20 |
| Link Distance (ft) | 633 |  |  | 1533 | 1533 |  | 138 | 138 |  |
| Upstream Blk Time (\%) |  |  |  |  |  |  | 9 | 11 | 0 |
| Queuing Penalty (veh) |  |  |  |  |  |  | 87 | 105 | 0 |
| Storage Bay Dist (ft) |  | 200 | 150 |  |  | 250 |  |  | 200 |
| Storage Blk Time (\%) |  |  | 0 | 38 | 0 | 0 |  | 11 | 0 |
| Queuing Penalty (veh) |  |  | 2 | 15 | 0 | 0 |  | 2 | 0 |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | EB | EB | EB | EB | WB | WB | NB | NB | NB | NB | B25 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | L | L | T | R | L | T | L | T | T | R | T |
| T |  |  |  |  |  |  |  |  |  |  |  |
| Maximum Queue (ft) | 207 | 220 | 1227 | 84 | 57 | 100 | 261 | 390 | 392 | 140 | 110 |
| Average Queue (ft) | 200 | 214 | 924 | 34 | 16 | 34 | 108 | 203 | 206 | 16 | 8 |
| 95th Queue (ft) | 230 | 242 | 1573 | 69 | 45 | 76 | 245 | 394 | 407 | 97 | 56 |
| Link Distance (ft) |  |  | 1180 |  |  | 265 |  | 317 | 317 | 62 |  |
| Upstream Blk Time (\%) |  |  | 42 |  |  |  |  | 4 | 5 |  | 652 |
| Queuing Penalty (veh) |  |  | 0 |  |  |  |  | 23 | 27 |  |  |
| Storage Bay Dist (ft) | 195 | 195 |  | 150 | 190 |  | 250 |  |  | 150 |  |
| Storage Blk Time (\%) | 22 | 55 |  |  |  |  | 1 | 7 | 16 | 0 |  |
| Queuing Penalty (veh) | 35 | 88 |  |  |  |  | 6 | 7 | 4 | 0 |  |

Intersection: 5: Missouri Flat Road \& Forni Road

| Movement | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R |
| Maximum Queue (ft) | 324 | 392 | 396 | 175 |
| Average Queue (ft) | 168 | 303 | 339 | 149 |
| 95th Queue (ft) | 312 | 457 | 462 | 232 |
| Link Distance (ft) |  | 365 | 365 |  |
| Upstream Blk Time (\%) |  | 6 | 14 |  |
| Queuing Penalty (veh) |  | 62 | 137 |  |
| Storage Bay Dist (ft) | 300 |  |  | 150 |
| Storage Blk Time (\%) | 0 | 13 | 30 | 1 |
| Queuing Penalty (veh) | 1 | 20 | 138 | 6 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | EB | WB | NB | NB | NB | B43 | B43 | SB | SB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| B25 |  |  |  |  |  |  |  |  |  |  |  |
| Directions Served | LTR | LTR | L | T | TR | T | T | L | T | T | R |
| Maximum Queue (ft) | 166 | 253 | 175 | 298 | 294 | 250 | 236 | 200 | 663 | 681 | 423 |
| Average Queue (ft) | 83 | 152 | 111 | 217 | 216 | 45 | 39 | 88 | 351 | 421 | 23 |
| 95th Queue (ft) | 145 | 241 | 197 | 328 | 326 | 207 | 186 | 186 | 685 | 735 | 190 |
| Link Distance (ft) | 184 | 339 |  | 216 | 216 | 1589 | 1589 |  | 652 | 652 | 70 |
| Upstream BIk Time (\%) | 0 |  |  | 14 | 11 |  |  |  | 1 | 3 | 317 |
| Queuing Penalty (veh) | 0 |  |  | 86 | 64 |  |  |  | 7 | 19 | 0 |
| Storage Bay Dist (ft) |  |  | 150 |  |  |  |  | 175 |  | 0 |  |
| Storage Blk Time (\%) |  |  | 11 | 17 |  |  |  | 2 | 19 | 11 | 0 |
| Queuing Penalty (veh) |  |  | 57 | 16 |  |  |  | 12 | 15 | 1 | 0 |

Intersection: 6: Missouri Flat Road \& Golden Center Drive

| Movement | B25 | B25 |
| :--- | ---: | ---: |
| Directions Served | T |  |
| Maximum Queue (ft) | 221 | 4 |
| Average Queue (ft) | 15 | 0 |
| 95th Queue (ft) | 122 | 4 |
| Link Distance (ft) | 317 | 317 |
| Upstream Blk Time (\%) | 0 |  |
| Queuing Penalty (veh) | 0 |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 7: Missouri Flat Road \& China Garden Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | R | R | L |
| Maximum Queue (ft) | 32 | 129 | 30 |
| Average Queue (ft) | 4 | 58 | 5 |
| 95th Queue (ft) | 22 | 105 | 24 |
| Link Distance (ft) | 145 | 1441 |  |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  | 150 |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 8: SR 49 \& Pleasant Valley Rd

| Movement | EB | WB | WB | NB |
| :--- | ---: | ---: | ---: | ---: |
| Directions Served | TR | L | T | LR |
| Maximum Queue (ft) | 850 | 104 | 184 | 176 |
| Average Queue (ft) | 512 | 67 | 71 | 77 |
| 95th Queue (ft) | 1005 | 105 | 134 | 135 |
| Link Distance (ft) | 797 |  | 363 | 576 |
| Upstream Blk Time (\%) | 36 |  |  |  |
| Queuing Penalty (veh) | 0 |  |  |  |
| Storage Bay Dist (ft) |  | 80 |  |  |
| Storage Blk Time (\%) |  | 4 | 3 |  |
| Queuing Penalty (veh) |  | 15 | 9 |  |

## Intersection: 9: Pleasant Valley Rd \& Forni Rd

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LT | TR | LR |
| Maximum Queue (ft) | 200 | 17 | 263 |
| Average Queue (ft) | 50 | 1 | 65 |
| 95th Queue (ft) | 133 | 8 | 200 |
| Link Distance (ft) | 363 | 1758 | 930 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Intersection: 10: Pleasant Valley Rd \& Missouri Flat Rd

| Movement | EB | EB | EB | WB | WB | SB | SB | B68 | B68 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | L | T | T | R | L | R | T | T |
| Maximum Queue (ft) | 130 | 176 | 280 | 241 | 177 | 204 | 158 | 88 | 5 |
| Average Queue (ft) | 66 | 68 | 101 | 117 | 47 | 138 | 71 | 8 | 0 |
| 95th Queue (ft) | 108 | 122 | 197 | 197 | 118 | 212 | 134 | 46 | 7 |
| Link Distance (ft) |  |  | 658 | 1506 |  | 127 | 127 | 419 | 419 |
| Upstream Blk Time (\%) |  |  | 0 |  |  | 11 | 1 |  |  |
| Queuing Penalty (veh) |  |  | 0 |  |  | 53 | 5 |  |  |
| Storage Bay Dist (ft) | 200 | 200 |  |  | 200 |  |  |  |  |
| Storage Blk Time (\%) |  |  | 1 | 1 | 0 |  |  |  |  |
| Queuing Penalty (veh) |  |  | 2 | 2 | 0 |  |  |  |  |

Intersection: 11: Pleasant Valley Rd \& China Garden Rd

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 190 | 47 |
| Average Queue (ft) | 17 | 24 |
| 95th Queue (ft) | 102 | 49 |
| Link Distance (ft) | 1506 | 266 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 12: Fowler Ln/Diamond Rd \& Pleasant Valley Rd

| Movement | EB | EB | EB | WB | WB | WB | B60 | NB | NB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | TR | L | T | R | T | LT | R | L | TR |
| Maximum Queue (ft) | 204 | 301 | 270 | 125 | 429 | 195 | 4 | 159 | 109 | 329 | 157 |
| Average Queue (ft) | 74 | 154 | 100 | 53 | 180 | 92 | 0 | 78 | 36 | 187 | 55 |
| 95th Queue (ft) | 152 | 246 | 202 | 120 | 334 | 210 | 4 | 135 | 80 | 292 | 127 |
| Link Distance (ft) |  | 1257 |  |  | 549 |  | 458 | 614 |  |  | 1686 |
| Upstream Blk Time (\%) |  |  |  |  | 0 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  | 1 |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 180 |  | 250 | 105 |  | 170 |  |  | 90 | 340 |  |
| Storage Blk Time (\%) | 0 | 5 | 0 | 1 | 21 | 0 |  | 7 | 0 | 0 |  |
| Queuing Penalty (veh) | 2 | 20 | 1 | 5 | 70 | 1 |  | 4 | 0 | 0 |  |

Intersection: 13: Driveway/Racquet Way \& Pleasant Valley Rd

| Movement | EB | EB | B60 | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | TR | T | L | LTR | LTR |
| Maximum Queue (ft) | 77 | 16 | 115 | 43 | 125 | 98 |
| Average Queue (ft) | 26 | 1 | 4 | 13 | 50 | 38 |
| 95th Queue (ft) | 59 | 9 | 84 | 38 | 96 | 71 |
| Link Distance (ft) |  | 458 | 549 |  | 122 | 679 |
| Upstream Blk Time (\%) |  |  | 0 |  | 1 |  |
| Queuing Penalty (veh) |  |  | 0 |  | 0 |  |
| Storage Bay Dist (ft) | 90 |  |  | 60 |  |  |
| Storage Blk Time (\%) | 0 | 0 |  | 0 |  |  |
| Queuing Penalty (veh) | 1 | 0 |  | 0 |  |  |

Intersection: 14: Diamond Rd \& Truck St

| Movement | EB | NB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 66 | 75 |
| Average Queue (ft) | 29 | 9 |
| 95th Queue (ft) | 55 | 41 |
| Link Distance (ft) | 488 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 15: Diamond Rd \& Bradley Dr

| Movement | EB | SB |
| :--- | ---: | ---: |
| Directions Served | R | TR |
| Maximum Queue (ft) | 37 | 33 |
| Average Queue (ft) | 17 | 2 |
| 95th Queue (ft) | 40 | 22 |
| Link Distance (ft) | 621 | 394 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 16: Diamond Rd \& Lime Kiln Rd/Black Rice Ln

| Movement | EB | WB | NB | NB | SB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | R | R | L | TR | L | TR |
| Maximum Queue (ft) | 36 | 57 | 30 | 2 | 47 | 1 |
| Average Queue (ft) | 11 | 28 | 2 | 0 | 14 | 0 |
| 95th Queue (ft) | 34 | 50 | 14 | 2 | 38 | 1 |
| Link Distance (ft) | 602 | 1011 |  | 1686 |  | 558 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 200 |  | 100 |  |
| Storage Bay Dist (ft) |  |  |  |  |  |  |
| Storage Blk Time (\%) |  |  |  |  |  |  |

Intersection: 17: Diamond Rd \& Diamond Springs Parkway/Project Access

| Movement | EB | EB | EB | WB | WB | NB | NB | NB | SB | SB | SB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | R | L | TR | L | L | TR | L | T | R |
| Maximum Queue (ft) | 212 | 106 | 419 | 75 | 140 | 169 | 237 | 413 | 116 | 376 | 72 |
| Average Queue (ft) | 90 | 18 | 200 | 29 | 68 | 94 | 90 | 242 | 13 | 254 | 32 |
| 95th Queue (ft) | 171 | 66 | 364 | 66 | 121 | 152 | 190 | 385 | 59 | 358 | 58 |
| Link Distance (ft) |  | 894 | 894 |  | 562 |  |  | 558 |  | 388 | 388 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  | 0 |  | 1 |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |  | 0 |  | 1 |  |
| Storage Bay Dist (ft) | 250 |  |  | 200 |  | 350 | 350 |  | 100 |  |  |
| Storage Blk Time (\%) | 0 |  |  |  |  |  |  | 1 |  | 48 |  |
| Queuing Penalty (veh) | 0 |  |  |  |  |  |  | 3 |  | 5 |  |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | EB | EB | EB | EB | B43 | B43 | WB | WB | WB | WB | NB | NB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Directions Served | L | T | T | R | T | T | L | T | T | R | L | L |
| Maximum Queue (ft) | 74 | 217 | 199 | 53 | 17 | 60 | 104 | 156 | 148 | 40 | 252 | 268 |
| Average Queue (ft) | 11 | 99 | 92 | 2 | 1 | 4 | 41 | 59 | 57 | 4 | 132 | 147 |
| 95th Queue (ft) | 46 | 174 | 164 | 39 | 17 | 33 | 87 | 123 | 119 | 26 | 214 | 233 |
| Link Distance (ft) |  | 1589 | 1589 |  | 216 | 216 |  | 2033 | 2033 |  |  | 451 |
| Upstream BIk Time (\%) |  |  |  |  |  | 0 |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  | 0 |  |  |  |  |  |  |
| Storage Bay Dist (ft) | 125 |  |  | 250 |  |  | 500 |  |  | 175 | 275 |  |
| Storage BIk Time (\%) |  | 3 | 0 | 0 |  |  |  |  | 0 |  | 0 | 0 |
| Queuing Penalty (veh) |  | 0 | 0 | 0 |  |  |  |  | 0 |  | 0 | 1 |

Intersection: 18: Missouri Flat Road \& Missouri Flat Rd/Diamond Springs Parkway

| Movement | NB | SB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | TR | L | TR |
| Maximum Queue (ft) | 85 | 37 | 38 |
| Average Queue (ft) | 34 | 8 | 13 |
| 95th Queue (ft) | 68 | 28 | 34 |
| Link Distance (ft) | 451 |  | 278 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  | 50 |  |
| Storage Blk Time (\%) |  | 0 | 0 |
| Queuing Penalty (veh) |  | 0 | 0 |

Intersection: 19: Throwita Way \& Diamond Springs Parkway

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | SB |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | L | T | T | R | L | T | TR | LT | R | LTR |
| Maximum Queue (ft) | 107 | 164 | 198 | 75 | 95 | 78 | 95 | 156 | 69 | 128 |
| Average Queue (ft) | 38 | 38 | 60 | 12 | 38 | 23 | 30 | 74 | 25 | 54 |
| 95th Queue (ft) | 84 | 111 | 156 | 54 | 80 | 60 | 75 | 135 | 53 | 102 |
| Link Distance (ft) |  | 2033 | 2033 |  |  | 894 | 894 | 462 |  | 282 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  | 200 | 200 |  |  |  | 200 |  |
| Storage Bay Dist (ft) | 200 |  |  | 0 | 0 |  |  |  | 0 |  |
| Storage Blk Time (\%) |  | 0 | 0 | 0 |  |  |  | 0 |  |  |
| Queuing Penalty (veh) |  | 0 | 0 | 0 |  |  |  |  |  |  |

## Zone Summary

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Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=90]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1715]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.


[^6]

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=90]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1715]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

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[^11]| 2027 AM |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Peak Hour Delay Signal Warrant Report |  |  |  |  |  |  |  |  |  |  |  |
| *************************************************************************** |  |  |  |  |  |  |  |  |  |  |  |
| Intersection \#11 China Garden Rd / Pleasant Valley Rd <br>  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Base Volume Alternative: Peak Hour Warrant NOT Met |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Initial Vol: $0 \quad 0 \quad 0 \quad 5 \quad 0 \quad 10 \quad 10 \quad 365$ |  |  |  |  |  |  |  |  |  |  |  |
| ApproachDel: $\quad 19.9$ xxxxx 19 xxxxxx |  |  |  |  |  |  |  |  |  |  |  |
| Approach[southbound][lanes=1][control=Stop Sign] |  |  |  |  |  |  |  |  |  |  |  |
| Signal Warrant Rule \#1: [vehicle-hours=0.1] |  |  |  |  |  |  |  |  |  |  |  |
| FAIL - Vehicle-hours less than 4 for one lane approach. |  |  |  |  |  |  |  |  |  |  |  |
| Signal Warrant Rule \#2: [approach volume=15] |  |  |  |  |  |  |  |  |  |  |  |
| FAIL - Approach volume less than 100 for one lane approach. |  |  |  |  |  |  |  |  |  |  |  |
| Signal Warrant Rule \#3: [approach count=3][total volume=1335] |  |  |  |  |  |  |  |  |  |  |  |
| SUCCEED - Total volume greater than or equal to 650 for intersection |  |  |  |  |  |  |  |  |  |  |  |

SIGNAL WARRANT DISCLAIMER
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SIGNAL WARRANT DISCLAIMER
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Approach[northbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=30]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1340]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=60]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1340]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
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Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=1.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=180]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=2040]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Approach[westbound] [lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=1.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=180]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=2040]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

| 2027 PM plus Project |  |  |  |  |  |  |  |  |  |
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| Peak Hour Volume Signal Warrant Report [Rural] |  |  |  |  |  |  |  |  |  |
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| Intersection \#7 China Garden Rd / MF Rd <br>  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Future Volume Alternative: Peak Hour Warrant Met |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |
| Major Street Volume: 1855 <br> Minor Approach Volume: 180 <br> Minor Approach Volume Threshold: $-20 \quad$ [less than minimum of 75] |  |  |  |  |  |  |  |  |  |
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| SIGNAL WARRANT DISCLAIMER <br> This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants). |  |  |  |  |  |  |  |  |  |
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| The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results. |  |  |  |  |  |  |  |  |  |

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SIGNAL WARRANT DISCLAIMER
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Approach[northbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=1.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=80]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1650]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.4]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=85]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1650]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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| 2035 AM - No Project |  |  |  |  |  |  |  |
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| Peak Hour Delay Signal Warrant Report <br>  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Intersection \#7 China Garden Rd / MF Rd <br>  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Future Volume Alternative: Peak Hour Warrant NOT Met |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |
| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |
| ApproachDel: xxxxxx $\mathrm{xxxxxx}^{\text {a }} 12.10 .5$ |  |  |  |  |  |  |  |
| Approach [eastbound] [lanes=1] [control=Stop Sign] |  |  |  |  |  |  |  |
| Signal Warrant Rule \#1: [vehicle-hours=0.0] |  |  |  |  |  |  |  |
| FAIL - Vehicle-hours less than 4 for one lane approach. |  |  |  |  |  |  |  |
| Signal Warrant Rule \#2: [approach volume=5] |  |  |  |  |  |  |  |
| FAIL - Approach volume less than 100 for one lane approach. |  |  |  |  |  |  |  |
| Signal Warrant Rule \#3: [approach count=4][total volume=1732] |  |  |  |  |  |  |  |
| SUCCEED - Total volume greater than or equal to 800 for intersection |  |  |  |  |  |  |  |

Approach[westbound] [lanes=1] [control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=55]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1732]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Approach[southbound] [lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.9]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=155]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=3] [total volume=1126]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Approach[southbound] [lanes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=15]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=3] [total volume=1349]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Peak Hour Delay Signal Warrant Report


Approach[westbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours =0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=55]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=1735]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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| Peak Hour Volume Signal Warrant Report [Rural] |  |  |  |  |  |  |  |  |  |  |  |  |
| ******************************************************************************* |  |  |  |  |  |  |  |  |  |  |  |  |
| Intersection \#7 China Garden Rd / MF Rd <br>  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Approach: North Bound South Bound East Bound$\quad$ West Bound |  |  |  |  |  |  |  |  |  |  |  |  |
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| Major Street Volume: 1675 <br> Minor Approach Volume: 55 <br> Minor Approach Volume Threshold: 3 [Iess than minimum of 75] |  |  |  |  |  |  |  |  |  |  |  |  |
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| SIGNAL WARRANT DISCLAI MER |  |  |  |  |  |  |  |  |  |  |  |  |
| This peak hour signal warrant analysis should be considered solely as an |  |  |  |  |  |  |  |  |  |  |  |  |
| "indicator" of the likelihood of an unsignalized intersection warranting |  |  |  |  |  |  |  |  |  |  |  |  |
| a traffic signal in the future. Intersections that exceed this warrant |  |  |  |  |  |  |  |  |  |  |  |  |
| are probably more likely to meet one or more of the other volume based |  |  |  |  |  |  |  |  |  |  |  |  |
| signal warrant (such as the 4 -hour or 8-hour warrants). |  |  |  |  |  |  |  |  |  |  |  |  |
| The peak hour warrant analysis in this report is not intended to replace |  |  |  |  |  |  |  |  |  |  |  |  |
| a rigorous and complete traffic signal warrant analysis by the responsible |  |  |  |  |  |  |  |  |  |  |  |  |
| jurisdiction. Consideration of the other signal warrants, which is beyond |  |  |  |  |  |  |  |  |  |  |  |  |
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Peak Hour Delay Signal Warrant Report

Intersection \#9 Forni Rd / Pleasant Valley Rd

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach[southbound][| anes =1][control=Stop sign]
Signal Warrant Rule \#1: [vehicle-hours =0.9]
FAlL - Vehiclehours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=155]
SUCCEED - Approach volume greater than or equal to 100 for one Iane approach.
Signal Warrant Rule \#3: [approach count =3][total volume=1130]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Peak Hour Del ay Signal Warrant Report


SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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$\begin{array}{ll}\text { Major Street Volume: } & \\ \text { Minor Approach Volume: } & 1345 \\ \text { Min } & 15\end{array}$
Minor Approach Volume Threshold: 45 [less than mi nimum of 75]
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4-hour or 8 -hour warrants).

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Peak Hour Delay Signal Warrant Report


Approach[southbound][Ianes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=65]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=1425]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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## Major Street Volume: <br> 1325

Minor Approach Volume: 65

SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to met one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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2035 AM - Plus Project
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Peak Hour Delay Signal Warrant Report


SI GNAL WARRANT DISCLAI MER
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Peak Hour Del ay Signal Warrant Report


SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the $4-h o u r$ or 8 -hour warrants).

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Peak Hour Del ay Signal Warrant Report


Approach[westbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours =0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=55]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule \#3: [approach count=4][total volume=960]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Signal Warrant Summary Report


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2035 PM - No Project
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Peak Hour Delay Signal Warrant Report

Intersection \#7 China Garden Rd / MF Rd

Future Volume Alternative: Peak Hour Warrant NOT Met


Approach[westbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours =0.7]
FAlL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=185]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule \#3: [approach count =4][total volume =2030]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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2035 PM - No Project
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Peak Hour Volume Signal Warrant Report [Rural]

$\begin{aligned} & \text { Major Street Volume: } \\ & 1840\end{aligned}$
Minor Approach Volume: 185
Minor Approach Volume Threshold: - 18 [less than minimum of 75]
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to met one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Major Street Volume: 1190
Minor Approach Volume: 309
Minor Approach Volume Threshold: 82
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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2035 PM - No Project
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Peak Hour Delay Signal Warrant Report

Intersection \#9 Forni Rd / Pleasant Valley Rd

Future Volume Alternative: Peak Hour Warrant NOT Met

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4 -hour or 8-hour warrants).
The peak hour warrant analysis in this report is not intended to replace
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jurisdiction. Consideration of the other signal warrants, which is beyond
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Peak Hour Del ay Signal Warrant Report


Approach[southbound][Ianes =1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.1]
FAlL - Vehicle hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=30]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =3][total volume=1370]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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Peak Hour Delay Signal Warrant Report


Approach[southbound][Ianes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.5]
FAlL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=90]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=1714]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered sol ely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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```
2035 PM - No Project
```

Peak Hour Delay Signal Warrant Report

## 

Intersection \#l4 Diamond Rd / Truck St

Future Volume Alternative: Peak Hour Warrant NOT Met


SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to met one or more of the other volume based signal warrant (such as the 4 -hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

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```
2035 PM - No Project
```

Peak Hour Delay Signal Warrant Report

Intersection \#16 Diamond Rd / Black Rice Road / Lime Kiln Rd

Future Volume Alternative: Peak Hour Warrant NOT Met

| Approach: |  | orth Bou |  | Sou | h Bo | und |  |  |  | Bo | un |  | West Bound |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement: | L | 1 | R | L. | 1 |  | R | L |  | T |  | R | L |  | T | R |
| Control: |  | Uncontrol |  | Unc | ontro | 11 |  |  | St |  |  |  |  | St 0 | S |  |
| Lanes: |  | 001 | - | 10 | 0 | 1 | 0 | 0 | 0 | 1 ! | 0 | 0 | 0 | O | $1!$ | 0 |
| Initial Vol: | 5 | 5400 | 5 | 60 | 545 |  | 90 |  | 10 | 0 |  | 5 |  |  | 0 | 55 |
| ApproachDel: |  | xxxxxx |  |  | xxx |  |  |  |  | . 3 |  |  |  |  | . 6 |  |

Approach[eastbound][Ianes=1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.1]
FAlL - Vehicle hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=15]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=1180]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours =0.2]
FAlL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=60]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=1180]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Signal Warrant Summary Report

| Intersection |  |  | Future | Met |
| :---: | :---: | :---: | :---: | :---: |
|  | Del | Vol] | [Del / | Vol] |
| \# 7 China Garden Rd / MF Rd | No | Yes | ??? / | ??? |
| \# 8 SR 49 / Pleasant Valley Rd | Yes |  | ??? |  |
| \# 9 Forni Rd / Pleasant Valley Rd | No | Yes | ? ?? 1 | ? ? ? |
| \# 11 China Garden Rd / Pleasant Valley R | No | No | ??? 1 | ??? |
| \# 13 Racquet Way / Pleasant Valley Rd | No | Yes | ??? 1 | ??? |
| \# 14 Diamond Rd / Truck St | No | No | ??? 1 | ??? |
| \# 15 Diamond Rd / Bradley Dr | No | No | ??? 1 | ??? |
| \# 16 Diamond Rd / BIack Rice Road / Lime | No | No | ??? / | ??? |

Intersection \#7 China Garden Rd / MF Rd

Base Volume Alternative: Peak Hour Warrant NOT Met


Approach[eastbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.0]
FAlL - Vehiclehours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=5]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=2040]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][Ianes=1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours =0.7]
FAll - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=185]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule \#3: [approach count =4][total volume =2040]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Major Street Volume: 1850
Minor Approach Volume: 185
Minor Approach Volume Threshold: - 20 [less than minimum of 75]
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4 -hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Major Street Volume: 1195
Minor Approach Volume: 310
Minor Approach Volume Threshold: 81
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4-hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Intersection \#9 Forni Rd / Pleasant Valley Rd

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach[southbound][I anes =1][control=Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.8]
FAlL - Vehiclehours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=180]
SUCCEED - Approach volume greater than or equal to 100 for one Iane approach.
Signal Warrant Rule \#3: [approach count =3][total volume=1210]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Mi nor Approach Volume:
Minor Approach Volume Threshold: 45 [less than mi nimum of 75]
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4-hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Peak Hour Delay Signal Warrant Report


Approach[southbound][Ianes =1][control =Stop Sign]
Signal Warrant Rule \#1: [vehicle-hours=0.6]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule \#2: [approach volume=90]
FAIL - Approach volume less than 100 for one I ane approach.
Signal Warrant Rule \#3: [approach count =4][total volume=1740]
SUCCEED. Total volume greater than or equal to 800 for intersection with four or more approaches.

SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Major Street Volume: 1560
Minor Approach Volume: 90
Minor Approach Volume Threshold: 20 [less than mi nimum of 75]
SI GNAL WARRANT DISCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to met one or more of the other volume based signal warrant (such as the 4-hour or 8 -hour warrants).

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2035 PM - Plus Project
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Peak Hour Volume Signal Warrant Report [Rural]


```
Major Street Volume: 1145
```

Minor Approach Volume: 60
Minor Approach Volume Threshold: 91
SI GNAL WARRANT DI SCLAI MER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to met one or more of the other volume based
signal warrant (such as the 4 -hour or 8 -hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

## Piedmont Oaks Estates

2 messages
Katie Jackson [katie.jackson@edcgov.us](mailto:katie.jackson@edcgov.us)
Mon, May 8, 2017 at 10:50 AM
To: Rommel Pabalinas [rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)
Cc: Natalie Porter [natalie.porter@edcgov.us](mailto:natalie.porter@edcgov.us), Dave Spiegelberg [dave.spiegelberg@edcgov.us](mailto:dave.spiegelberg@edcgov.us)
Hi Mel,
As requested, I recalculated the trip generation of the Piedmont Oaks project assuming 75 SFDU's and 20 ksf of general office. The new trip generation summary is as follows:

Daily - 1, 192 daily trips
AM Peak hour - 115 total trips, 62 inbound trips and 52 outbound trips
PM Peak hour - 182 total trips, 68 inbound trips and 114 outbound trips
With these revised trip generation numbers, the proposed project would send approximately 16 AM peak hour trips and 25 PM peak hour trips through the Pleasant Valley Rd/Racquet Way intersection.

Katie
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Rommel Pabalinas [rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)
Mon, May 8, 2017 at 11:36 AM
To: Katie Jackson [katie.jackson@edcgov.us](mailto:katie.jackson@edcgov.us)
Thanks.
[Quoted text hidden]
--

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# TRAFFIC IMPACT ANALYSIS 

## FOR

## PIEDMONT OAK ESTATES

El Dorado County CA

Prepared For:
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December 19, 2014

5360-01

0 Piedmont Oak Estates TIA.rpt

## TRAFFIC IMPACT ANALYSIS FOR PIEDMONT OAK ESTATES El Dorado County CA

## TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... i
INTRODUCTION ..... 1
Study Purpose and Objectives ..... 1
Project Description ..... 1
EXISTING SETTING ..... 4
Study Area ..... 4
Study Area Intersections ..... 4
Analysis Criteria ..... 7
Public Transit ..... 9
Bicycle and Pedestrian Facilities ..... 9
Existing Traffic Operating Conditions ..... 10
PROJECT CHARACTERISTICS ..... 15
Trip Generation ..... 15
Trip Distribution \& Assignment ..... 16
PROJECT TRAFFIC IMPACTS ..... 19
Existing Plus Project Conditions ..... 19
Project Access ..... 19
EXISTING PLUS APPROVED PROJECTS IMPACTS (2019) ..... 25
Analysis Methodology ..... 25
Year 2019 Forecasts/Conditions ..... 25
2019 Plus Project ..... 31
CUMULATIVE IMPACTS (2035) ..... 35
Year 2035 Forecasts/Conditions ..... 35
Year 2035 Plus Project ..... 41
FINDINGS/RECOMMENDATIONS/MITIGATIONS ..... 49
Existing Conditions. ..... 49
Existing Plus Project Conditions - Mitigations ..... 49
2019 Conditions - Recommendations ..... 49
2019 Plus Project Conditions - Mitigations ..... 49
2035 Conditions - Recommendations ..... 50
2035 Plus Project Conditions - Mitigations ..... 51
REFERENCES ..... 53
APPENDIX ..... 54

# TRAFFIC IMPACT ANALYSIS FOR PIEDMONT OAK ESTATES El Dorado County CA 

## EXECUTIVE SUMMARY

- Project Description. The Piedmont Oak Estates project consists of 104 single family residential units and 20,000 square feet of business professional uses. The project is located along the east side of Diamond Road (State Route 49) in El Dorado County. Public access will be provided along Diamond Road and will be the east leg of the future Diamond Springs Parkway / Diamond Road intersection. The project is expected to generate approximately 1,475 new daily trips, with 135 new trips occurring during the a.m. peak hour and 210 new trips generated during the p.m. the p.m. peak hour.
- Existing Setting. The study areas addressed traffic conditions at sixteen existing intersections on Missouri Flat Road, Pleasant Valley Road and Diamond Road. Traffic volume data was obtained from the traffic study prepared for the Diamond Springs / El Dorado Area Mobility and Livable Community Plan (DSEDAMLCP) and from new counts made in April 2014 and July 2014.

Level of Service calculations were made using the analysis tools employed for the DSEDAMLCP (i.e., Synchro-Simtraffic). All study intersections operate at a Levels of Service that satisfies the County's Minimum Level of Service threshold. None of the unsignalized study intersections carry traffic volumes that meet peak hour signal warrants. No improvement recommendations were identified for existing conditions.

- Existing Plus Project Impacts. The operation of the proposed project will increase the volume of traffic on the study area circulation system. However all study intersections will continue to satisfy the County's minimum Level of Service standard and mitigation measures are not required. The following mitigations are made:
- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- Sidewalk should be installed along the curb returns along the east side of Diamond Road as part of Piedmont Oaks development to provide contiguous access between the project site and the Diamond Dorado Center.

Diamond Road / Project Access intersection: A left turn lane with standard Caltrans transitions on each approach and departure should be constructed along Diamond Road for left turn access into the project site. The left turn lane should be constructed back to back with the left turn lane at Bradley Drive. The left turn lane for the project should be 100 ' with the left turn lane at Bradley Drive 120' long.

- Year 2019 Background Conditions. Year 2019 conditions were identified based on interpolation between current traffic volumes and Year 2035 traffic volume forecasts made for the DSEDAMLCP. Two approved / pending projects were added to these traffic volumes. These projects included The Crossing and Willow Creek Retail Center. The Crossing is located north of the Missouri Flat Road / US 50 interchange while Willow Creek is located in the northwest quadrant of the Missouri Flat Road / Forni Road intersection. One intersection, Missouri Flat Road at China Garden Road will decline below the County's minimum Level of Service standard. Although the County General Plan allows LOS F conditions along Missouri Flat Road between Mother Lode Drive and China Garden Road this does not apply to the intersections. The intersection meets the peak hour traffic signal warrant and signalization of this intersection will improve the operation in the a.m. peak hour to LOS B (18.4 seconds delay).
- 2019 Plus Project Conditions. The trips generated by the proposed project were superimposed onto the Year 2019 background conditions, and resulting peak hour Levels of Service were calculated. Three intersections will operate below the County's minimum Level of Service standard.

Missouri Flat Road / China Garden Road intersection: Under project conditions the intersection will continue to operate at LOS F conditions on the eastbound driveway and westbound approach. The project should pay their fair share of signalizing the intersection identified in the 2019 Conditions section. The fair share is project traffic divided by the difference in future and existing volumes. With Diamond Springs Parkway (DSP) being constructed in the future, traffic will shift to DSP, resulting in a net decrease in traffic by 2035 at the Missouri Flat Road / China Garden Road intersection. The fair share methodology was determined using the total volumes at the Missouri Flat Road / DSP intersection as all traffic at this intersection would travel through the Missouri Flat Road / China Garden Road if DSP were not constructed. Using this method the project is responsible for $6.41 \%$ of the project cost. With signalization the intersection will operate at LOS B (18.7 seconds) in the a.m. peak hour and LOS C (30.2 seconds) in the p.m. peak hour.

Pleasant Valley Road / Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in both AM and PM peak hours. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR-49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. No mitigation is recommended as part of this project.

Pleasant Valley Road / Racquet Way intersection: This intersection will operate with the southbound approach at LOS F in the AM peak hour. Installation of a traffic signal will improve the intersection operation to LOS C ( 31.4 seconds per vehicle). The project should pay their fair share of the improvement as the intersection will decline to LOS F in the 2035 No Project Condition. Using the Caltrans fair share methodology the project should pay $5.4 \%$ of the improvement.

- Year 2035 Background Conditions. Year 2035 traffic forecasts were based on the DSEDAMLCP traffic volumes and were expanded to account for traffic along the Diamond Springs Parkway Corridor and Diamond Road (SR 49). Traffic volumes not contained in the DSEDAMLCP were developed based upon the growth rates identified between Existing and 2035 DSEDAMLCP time periods, the Diamond Springs Parkway EIR Circulation Element and the Diamond Dorado Retail Center EIR Traffic Impact Analysis. Year 2019 conditions were identified based on interpolation between current traffic volumes and Year 2035 traffic volume forecasts made for the DSEDAMLCP.

Roadways in 2035 are projected to remain with their current lane configurations. The Diamond Springs Parkway, north of China Garden Road will connect Missouri Flat Road to Diamond Road (SR 49) and is projected to be completed by 2035. This roadway will include two through lanes in each direction with turn lanes at key intersections. Missouri Flat Road will become the west and south legs of the Missouri Flat Road / China Garden Road intersection. Missouri Flat Road south of China Garden Road will continue to include one through lane in each direction.

The Diamond Springs Parkway / Diamond Road intersection will include two left turn lanes and a through lane along the northbound approach, a through lane and a right turn lane along the southbound approach and a left lane and a right lane along the eastbound approach. The intersection will be signalized and was analyzed with the signal in 2035 conditions. As part of this project the Bradley Drive intersection will be modified to right-in, right-out access only. Additionally, the Diamond Road / Lime Kiln Road Black Rice Lane will be modified to allow right-in, right-out and left-in movements only.

An intermediate intersection at Throwita Way will be constructed. This intersection will include a left turn lane, two through lanes and a right turn lane for eastbound traffic, a left turn lane, a through lane and a through-right lane for westbound traffic, a single lane for south bound traffic and a right lane and a through-left lane for northbound traffic. The intersection will be signalized and was analyzed as part of the 2035 conditions.

Four intersections will operate below the County's minimum Level of Service standard.
Missouri Flat Road / US 50 Eastbound and Westbound Ramp intersections: The westbound US 50 ramp intersections will operate at LOS F conditions in 2035. A single point urban interchange (SPUI) should be considered that will combine the eastbound and westbound ramp intersections into a single intersection along Missouri Flat Road. The

SPUI would consist of two through lanes and two left turn lanes at the intersection with two left lanes and two right turn lane along the eastbound and westbound off-ramps. Implementation of this new interchange will result in LOS D (37.5 seconds per vehicle) operation at the new intersection. The County is currently undertaking the Missouri Flat Area Master Circulation and Funding Plan (MC\&FP) Phase II analysis which will provide a mechanism for the County to fund improvements to the U.S. Highway 50/Missouri Flat Road Interchange and adjacent arterials and collector roads.

Pleasant Valley Road/ SR 49 intersection: This intersection will operate at LOS F conditions in the AM peak hour ( 58.7 seconds per vehicle) and the PM peak hour (70.0 seconds per vehicle). As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road.

Pleasant Valley Road/ Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in the AM and PM peak hour. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR-49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road.

Pleasant Valley Road/ Racquet Way intersection: The southbound approach of this intersection will operate at LOS F conditions in the AM peak hour ( 55.8 seconds per vehicle). The intersection meets the traffic volume section of the peak hour signal warrant in the AM peak hour and both delay and volume sections of the warrant in the PM peak hour. Signalization of this intersection will improve the operation to an LOS B condition ( 19.7 seconds per vehicle) in the AM peak hour.

- 2035 Plus Project Conditions. The trips generated by the proposed project were superimposed onto the Year 2035 background conditions, and resulting peak hour Levels of Service were calculated. Five intersections will operate below the County's minimum Level of Service standard.

Missouri Flat Road / US 50 Eastbound and Westbound Ramp intersections: The westbound US 50 ramp intersections will both operate at LOS F conditions in 2035. A single point urban interchange (SPUI) should be considered that will combine both ramp intersections into a single intersection along Missouri Flat Road. The SPUI would
consist of two through lanes and two left turn lanes at the intersection with two left lanes and two right turn lane along the eastbound and westbound off-ramps. Implementation of this new interchange will result in LOS D ( 38.6 seconds per vehicle) operation at the new intersection.

The County is currently undertaking the Missouri Flat Area Master Circulation and Funding Plan (MC\&FP) Phase II analysis which will provide a mechanism for the County to fund improvements to the U.S. Highway 50/Missouri Flat Road Interchange and adjacent arterials and collector roads. Since there is no funding mechanism in place the project should pay their fair share of the improvements.

The project should pay their fair share of the improvement as the intersection will decline to LOS F in the 2035 No Project Condition. Using the Caltrans fair share methodology the project should pay $3.2 \%$ of the improvement.

Missouri Flat Road / China Garden Road intersection: Under project conditions the intersection will continue to operate at LOS F conditions on the eastbound driveway and westbound approach. The intersection was identified for signalization in the 2019 scenario. With signalization the intersection will operate at LOS A ( 9.7 seconds) in the PM peak hour.

Pleasant Valley Road/ SR 49 intersection: This intersection will operate at LOS F conditions in the AM peak hour ( 55.5 seconds per vehicle) and the PM peak hour (68.7 seconds per vehicle). As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. Since there is no defined project at this time there are no mitigations required for the project.

Pleasant Valley Road/ Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in both AM and PM peak hours. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR-49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans has indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. Since there is no defined project at this time there are no mitigations required for the project.

# TRAFFIC IMPACT ANALYSIS FOR PIEDMONT OAK ESTATES El Dorado County CA 

## INTRODUCTION

## Study Purpose and Objectives

This study evaluates the traffic impacts associated with the construction of the Piedmont Oak Estates project. The Piedmont Oak Estates project includes construction of 104 single family residential units and 20,000 square feet (sf) of business professional offices. The project is located east of Diamond Road (State Route 49) and north of Black Rice Lane in El Dorado County.

A previous study was completed in 2012 for the site. The scope of this traffic analysis was based on the previous study and was reviewed with the El Dorado County Department of Transportation (DOT) for concurrence of scope parameters. Based on direction from DOT this study addresses the following scenarios:

1. Existing (2014) Traffic Conditions
2. Existing (2014) Plus Project Conditions
3. 2019 Traffic Conditions
4. 2019 Plus Project Conditions
5. 2035 Traffic Conditions
6. 2035 Plus Project Conditions

The objective of this study is to identify those roads and street intersections that may be impacted by development of this project based on El Dorado County significance criteria.

## Project Description

The proposed project includes 104 residential lots and $20,000 \mathrm{sf}$ of professional office building space. The project is located east of Diamond Road (SR 49) and north of Black Rice Lane and is shown in Figure 1. Full access will be provided at a new intersection about 750' north of Lime Kiln Road-Black Rice Lane. This intersection will also serve as the eastern terminus to the future Diamond Springs Parkway. Figure 2 illustrates the proposed site plan and the proposed new intersection along Diamond Road.

The project is located within Traffic Analysis Zone (TAZ) 365 and is currently zoned R1 and R1-PF-CPO, One Family Residential and Professional Office Commercial districts. The zoning will be modified for the project to R1-PD and C-PD. These include One Family Residential and Commercial zoning in Planned Developments.



## EXISTING SETTING

## Study Area

This study addresses traffic conditions at sixteen (16) existing intersections along Missouri Flat Road, Pleasant Valley Drive and Diamond Road. Three additional intersections along Diamond Springs Parkway were evaluated under future buildout conditions. The limits of the study area were based on the previous traffic study for the Piedmont Oak Estates Traffic Impact Analysis prepared by AECOM in 2012 and reviewed with El Dorado County DOT and DOT's traffic engineering consultant (Kittelson \& Associates [KAI]). The text that follows describes the roadway facilities included in this analysis.

The quality of traffic flow is typically governed by the operation of major intersections and the daily volume of traffic along the roadways. The physical characteristics of the study intersections are described in the text which follows.

## Study Area Intersections

The Missouri Flat Road / Plaza Drive intersection is located roughly 900 feet south of the project and is the most northerly intersection on a coordinated system of traffic signals at the US 50 intersection. Recent improvements have widened the intersection. Two through lanes are provided in each direction on Missouri Flat Road. The northbound approach includes dual left turn lanes and a separate right turn lane. The Plaza Drive approaches are each two lanes and operate with split phases. The eastbound approach is configured with a lane permitting all movements and a separate right turn lane. The westbound approach is similar but has a separate left turn lane.

The Missouri Flat Road / Westbound US 50 ramps intersection is controlled by a coordinated traffic signal. The Missouri Flat Road approaches feature dual northbound left turn lanes and a separate southbound right turn lane. The four lane exit from US 50 is configured with a dual left turn lane and dual right turn lanes.

The Missouri Flat Road / Eastbound US 50 ramps intersection is controlled by a coordinated traffic signal. The Missouri Flat Road approaches feature dual southbound left turn lanes and a separate northbound right turn lane. The three lane exit from US 50 is configured with a separate left turn lane and right turn lanes, as well as a combined left, thru and right turn lane.

The Missouri Flat Road / Mother Lode Drive intersection is signalized and located roughly 250 feet from the Eastbound US 50 ramps intersection. The Missouri Flat Road approaches have separate left turn and right turn lanes. The eastbound Mother Lode Drive approach has three lanes configured as dual left turns and a separate right turn lane.

The Missouri Flat Road / Forni Road intersection is also signalized and located roughly $1 / 2$ mile south of the Mother Lode Drive intersection. The Missouri Flat Road approaches each include separate left turn and right turn lanes. The Forni Road approaches have separate left turn,
through and right turn lanes, and a second left turn lane has been provided on the eastbound approach.

The Missouri Flat Road / Golden Center Drive intersection is located about 1,100 feet south of Forni Road. This signalized intersection includes separate left turn lanes on the Missouri Flat Road approaches and a separate right turn lane on the southbound approach. The Golden Center Drive approaches are single lanes which operate with permitted phasing.

The Missouri Flat Road / China Garden Road intersection is located about 2,100 feet south of Golden Center Drive. This unsignalized intersection includes single lanes along Missouri Flat Road with a separate left turn lane on the southbound approach. A CLTL is present on the northbound approach of Missouri Flat Road and north of the southbound left turn lane. The China Garden Road approach consists of a single lane which is stop controlled.

The Missouri Flat Road / (SR 49) Pleasant Valley Road intersection is located at the southern end of Missouri Flat Road roughly two miles from the project site. This tee intersection is controlled by an actuated traffic signal. The Pleasant Valley Road approaches have single through lanes in each direction, with dual eastbound left turn lanes and a separate westbound right turn lane. The two lane southbound approach on Missouri Flat Road is configured as separate left turn and right turn lanes, and the right turn "overlaps" the eastbound left turn phase.

The Pleasant Valley Road (SR 49) / SR-49 South intersection is located about $21 / 2$ miles southwest of the project site. This tee intersection is all-way stop controlled. Eastbound Pleasant Valley Road and northbound SR 49 have single lane approaches while westbound Pleasant Valley Road includes a left turn lane and a through lane.

The Pleasant Valley Road (SR 49) / Forni Road South intersection is located about 500' east of the SR-49 South intersection. This tee intersection is stop controlled along Forni Road which intersects Pleasant Valley Road at about a $30^{\circ}$ skew to the northeast. All roadway approaches are single lane.

The Pleasant Valley Road (SR 49) / China Garden Road intersection is located about $1 / 2$ mile southwest of the project site. This tee intersection is stop controlled along China Garden Road, and all roadway approaches are single lane.

The Pleasant Valley Road (SR 49) / Diamond Road (SR 49 North) / Fowler Lane intersection is located about $1 / 4$ mile south of the project site. This intersection is controlled by an actuated traffic signal. The eastbound Pleasant Valley Road approach includes a left turn lane, a through lane and a through-right lane. The westbound Pleasant Valley Road approach includes left turn, through and right turn lanes. The northbound Fowler Lane approach consists of a through-left lane and a right turn lane while the southbound Diamond Road approach includes a left turn lane and a through-right lane. The Pleasant Valley Road approaches provide protected left turn phasing while the Diamond Road and Fowler Lane approaches are split phase.

The Pleasant Valley Road (SR 49) / Racquet Way intersection is located about $1 / 4$ mile east of the Pleasant Valley Road / Diamond Road intersection. This intersection is stop controlled along Racquet Way to the north and a commercial driveway to the south. The Pleasant Valley Road approaches include left turn lanes and a through-right lane while Racquet Way and the driveway are single lane approaches.

The Diamond Road / Truck Street intersection is located about 700' north of the project's north intersection. This tee intersection is stop controlled along Truck Street, and all roadway approaches are single lane.

The Diamond Road / Bradley Drive intersection is located about 300' north of the project's north intersection. This tee intersection is stop controlled along Bradley Drive. The southbound Diamond Road approach and the Bradley Drive approach are single lane while the northbound Diamond Road approach consists of a left turn lane and a through lane. With the completion of the Diamond Springs Parkway in the future Bradley Drive will have only right-in, right-out movements.

The Diamond Road / Lime Kiln Road / Black Rice Lane intersection will provide emergency vehicle access to the project site. This intersection is stop controlled along Lime Kiln Road and Black Rice Lane. All approaches are single lane.

The Missouri Flat Road / Diamond Springs Parkway intersection is a future intersection that is part of the Diamond Springs Parkway project. This intersection when completed will consist of a left turn lane, two through lanes and a right turn lane along the eastbound (Missouri Flat Road) and westbound (Diamond Springs Parkway) approaches. The northbound Missouri Flat Road approach will consist of dual left turn lanes and a through-right lane. The opposing southbound approach will consist of a left turn lane and a through-right lane. This intersection will be signalized.

The Diamond Springs Parkway / Throwita Way intersection is a future intersection that will be located about 900' west of the Diamond Road / Diamond Springs Parkway intersection. This intersection will be signal controlled. The June 2010 Diamond Springs Parkway DEIR identifies the lane configuration at this intersection to include left and right turn lanes and two through lanes along Diamond Springs Parkway, a single lane along the southbound Throwita Way approach and a left-through lane and a right turn lane along the northbound Throwita Way approach.

The Diamond Road / Diamond Springs Parkway intersection is a future intersection that will provide direct access into the project site. This intersection will be signal controlled. The June 2010 Diamond Springs Parkway DEIR identifies the lane configuration at this intersection to include a left turn lane and a right turn lane along Diamond Springs Parkway, two left turn lanes and a through lane along the northbound Diamond Road approach and a right turn lane and a through lane along the southbound Diamond Road approach.

## Analysis Criteria

Level of Service Methodology. Level of Service Analysis has been employed to provide a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts. Level of Service measures the quality of traffic flow and is represented by letter designations from "A" to " F ", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions. The guidelines and analyses used for this report follow El Dorado County standards.

Local agencies adopt minimum Level of Service standards for their facilities. El Dorado County identifies LOS 'E' as the acceptable Level of Service on roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Centers and Rural Regions except as specified in the General Plan. Four roadway segments, none of which are part of this study, allow LOS F conditions after 2008. The analysis techniques presented in the 2010 Highway Capacity Manual were used to calculate Level of Service and to provide a basis for describing existing traffic conditions and evaluating the significance of project traffic impacts.

Various software programs have been developed to assist in calculating intersection Level of Service, and the level of sophistication of each program responds to factors that affect the overall flow of traffic. In this case, Synchro-Simtraffic software was employed in order to account for the effects of closely spaced traffic signals along Missouri Flat Road. The files originally developed for the El Dorado County Transportation Commission's Diamond Springs and El Dorado Area Mobility and Livable Community Plan (DSEDAMLCP) were obtained and, in consultation with El Dorado County DOT and KAI, applicable adjustments were made to reflect current geometry and operational characteristics. The simulation results contained herein reflect the average of the mean 10 one-hour simulation runs selected from a 20 run sample. Each run employed a 10 minute seeding period.

The intersection Levels of Service presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole at signalized intersections and at locations controlled by all-way stops. The average delay experienced by motorists yielding the right of way is the basis for identification of Level of Service at locations controlled by side street stop signs. Applicable Level of Service thresholds based on average delay are shown in Table 1.

Intersection Level of Service Thresholds of Significance. A traffic impact is considered to be significant under El Dorado County guidelines if the project causes an intersection to change from LOS E to LOS F. Worsening of conditions at facilities already operating at unacceptable levels of service is also considered a significant impact. The County's General Plan Policy TCXe defines worsen as any of the following conditions:
a. a $2 \%$ increase in traffic during the a.m. peak hour, p.m. peak hour or daily trips, or
b. the addition of 100 or more daily trips, or
c. the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

TABLE 1
LEVEL OF SERVICE DEFINITIONS

| Level of <br> Service | Signalized Intersection | Unsignalized Intersection | Roadway (Daily) |
| :---: | :--- | :--- | :--- |
| "A" | Uncongested operations, all queues <br> clear in a single-signal cycle. <br> Delay $\leq 10.0$ sec | Little or no delay. <br> Delay $\leq 10$ sec/veh | Completely free flow. |
| "B" | Uncongested operations, all queues <br> clear in a single cycle. <br> Delay $>10.0$ sec and $\leq 20.0$ sec | Short traffic delays. <br> Delay $>10$ sec/veh and <br> $\leq 15$ sec/veh | Free flow, presence of <br> other vehicles noticeable. |
| "C" | Light congestion, occasional backups <br> on critical approaches. <br> Delay $>20.0$ sec and $\leq 35.0$ sec | Average traffic delays. <br> Delay $>15$ sec/veh and <br> $\leq 25$ sec/veh | Ability to maneuver and <br> select operating speed <br> affected. |
| "D" | Significant congestion of critical <br> approaches but intersection <br> functional. Cars required to wait <br> through more than one cycle during <br> short peaks. No long queues formed. <br> Delay $>35.0$ sec and $\leq 55.0$ sec | Long traffic delays. <br> Delay $>25$ sec/veh and <br> $\leq 35$ sec/veh | Unstable flow, speeds and <br> ability to maneuver <br> restricted. |
| "E" | Severe congestion with some long <br> standing queues on critical <br> approaches. Blockage of intersection <br> may occur if traffic signal does not <br> provide for proteted turning <br> movements. Traffic queue may block <br> nearby intersection(s) upstream of <br> critical approach(es). <br> Delay $>55.0$ sec and $\leq 80.0$ sec | Very long traffic delays, failure, <br> extreme congestion. <br> Delay $>35$ sec/veh and <br> $\leq 50$ sec/veh | At or near capacity, flow <br> quite unstable. |
| "F" | Total breakdown, stop-and-go <br> operation. Delay $>80.0$ sec | Intersection blocked by external <br> causes. Delay $>50$ sec/veh | Forced flow, breakdown. |
| Sources: 2010 Highway Capacity Manual, Transportation Research Board (TRB) Special Report 209. |  |  |  |

Intersection Queuing Analysis. The quality of traffic flow can also be affected by queuing at signalized intersections. The lengths of peak period queues were identified and compared to available left lane storage to determine whether spillover from turn lanes would affect the adjoining travel lanes or extend through adjacent intersections. $95^{\text {th }}$ percentile queue lengths have been calculated as a byproduct of the Synchro-Simtraffic simulation. Those locations where the $95^{\text {th }}$ percentile queue exceeds the available storage have also been noted.

Traffic Signal Warrants. The extent to which existing or projected traffic volumes may justify signalization at un-signalized intersections has been determined based on consideration of traffic signal warrant presented in the Manual of Uniform Traffic Control Devices, 2012. For this analysis the volume thresholds associated with Warrant 3 (Peak Hour Volume) have been assessed. For this analysis the "rural" criteria have been employed based on speed limits in excess of 40 mph .

## Public Transit

The El Dorado County Transit Authority offers local fixed route, regional commuter route, dial-a-ride and para-transit services. The Diamond Springs Route (DS) is about $1 / 2$ mile from the project site. This route travels along Pleasant Valley Road and loops along Racquet Way. Passengers can use this route to travel to the Missouri Flat Road Transit Center where they can transfer to other routes. The route operates from about 7:00 a.m. to about 6:00 p.m. Monday through Friday at one-hour headways.

The Western El Dorado County Short and Long Range Transit Plan has identified the following improvements for transit service in the Diamond Springs area. Short Range improvements include beginning the route schedule at 6:00 a.m., extending the existing weekday route schedule by one hour at the end of the day and instituting Saturday service between 9:00 a.m. and 5:00 p.m. Long Range improvements include revising the route as a result of completion of Diamond Springs Parkway. This will allow the route to be reconfigured to include the Diamond Dorado Shopping Center along Diamond Springs Parkway. This may allow El Dorado Transit to provide a bus stop at or near the project entrance at the Diamond Road / Diamond Springs Parkway intersection.

## Bicycle and Pedestrian Facilities

Designated bicycle facilities do not exist in the vicinity of the project. According to the El Dorado County Bicycle Transportation Plan, Class II bike lanes are proposed along Diamond Road from Pleasant Valley Road to Diamond Springs Parkway. In addition, Class II bike facilities are also proposed along Pleasant Valley Road through Diamond Springs and along Diamond Springs Parkway between Diamond Road and Missouri Flat Road. The section of Missouri Flat Road, from about Forni Road to Pleasant Valley Road will also include Class II facilities. This network will provide bicyclists direct routes to and from the Piedmont Oaks site.

Diamond Road is a rural road and sidewalk is not present in the vicinity of the project. According to the El Dorado County Transportation Commission El Dorado County Transportation Plan new development has sidewalks fronting shopping centers and is contained in many residential subdivisions. It is possible that sidewalks will be installed along the west side of Diamond Road as part of the Diamond Dorado Center project. Sidewalks are proposed within the Piedmont Oaks project but not along the east side of Diamond Road. Sidewalk should be installed along the curb returns along the east side of Diamond Road as part of Piedmont Oaks development to provide a contiguous access between the project site and the Diamond Dorado Center.

## Existing Traffic Operating Conditions

Traffic Volume Counts. This analysis makes use of peak hour traffic volume counts presented in the Diamond Springs and El Dorado Area Mobility and Livable Community Plan (DSEDAMLCP) traffic study, as well as new traffic counts conducted on April 8, 2014 and July 30, 2014. The July counts were adjusted based on turning movement counts that were conducted at adjacent intersections while school was in session. The counts are included in the Appendix, and the intersection turning movements are presented in Figure 3.

Intersection Levels of Service. Table 2 summarizes current operating Levels of Service at the study area intersections developed based on mean 10 simulation runs conducted for each time period. As indicated, all study intersections currently operate with acceptable Levels of Service during the a.m. and p.m. peak hours.

Traffic Signal Warrants. Two unsignalized intersections carry volumes that meet the peak hour signal warrant criteria during either peak period. These include the Missouri Flat Road / China Garden Road intersection and the Pleasant Valley Road / SR 49 (South) intersection where the peak hour signal warrant is met in both AM and PM peak periods. Two additional intersections meet the peak hour volume portion of the peak hour warrant. These include the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / Racquet Way intersection.

|  |  |  | 4 <br> 0 <br> 0 <br> 0 |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd | US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 $q_{R 1-1}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat | China Garden Rd/Missouri Flat |  |
|  |  |  |  |
| (86) 132 <br> (394) 330 <br> Forni Rd / Pleasant Valley Rd | Missouri Flat/Pleasant Valley Rd | (9) 11 <br> (890) 359 <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd |  | Diamond Rd / Bradley Dr |  <br> Black Rice Rd/Lime Kiln Rd |
|  <br> Diamond Rd \& Diamond Springs Pkwy/Project |  |  | Legend AM Peak Hour Volume PM Peak Hour Volume Stop Sign Signalized Intersection |

TABLE 2
EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

| Location | Control | AM Peak Hour |  | PM Peak Hour |  | Traffic Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd / Plaza Dr | Signal | B | 16.7 | C | 27.7 | N/A |
| 2. Missouri Flat Rd / WB US 50 ramps | Signal | B | 18.4 | B | 17.2 | N/A |
| 3. Missouri Flat Rd / EB US 50 ramps | Signal | B | 16.2 | C | 21.3 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | A | 8.5 | A | 8.5 | N/A |
| 5. Missouri Flat Rd / Forni Rd | Signal | C | 21.8 | C | 20.6 | N/A |
| 6. Missouri Flat Rd / Golden Center Dr | Signal | B | 14.9 | C | 20.2 | N/A |
| 7. Missouri Flat Rd / China Garden Rd <br> NB Left <br> SB Left <br> EB <br> WB | WB Stop | $\begin{aligned} & \diamond \\ & \mathrm{C} \\ & \mathrm{E} \\ & \mathrm{C} \\ & \hline \end{aligned}$ | $\begin{gathered} \diamond \\ 15.2 \\ 37.4 \\ 23.9 \\ \hline \end{gathered}$ | $\begin{aligned} & \diamond \\ & \text { B } \\ & \text { B } \\ & \text { C } \\ & \hline \end{aligned}$ | $\begin{gathered} \diamond \\ 12.5 \\ 10.4 \\ 17.6 \\ \hline \end{gathered}$ | Yes* |
| 8. Pleasant Valley Rd (SR 49) / SR-49 South | AWS Stop | B | 12.5 | C | 15.3 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{D} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 31.8 \\ 6.0 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 11.8 \\ 6.5 \\ \hline \end{gathered}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | B | 17.6 | B | 16.9 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{gathered} 1.8 \\ 13.8 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{array}{r} 2.3 \\ 8.1 \\ \hline \end{array}$ | No |
| 12. Diamond Rd (SR 49)/Pleasant Valley Rd (SR 49) | Signal | B | 18.9 | B | 17.8 | N/A |
| 13. Pleasant Valley Rd / Racquet Way <br> NB <br> SB <br> EB Left <br> WB Left | $\begin{gathered} \text { NB / SB } \\ \text { Stop } \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.1 \\ & 9.9 \\ & 6.2 \\ & 6.6 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~B} \end{aligned}$ | $\begin{gathered} 19.2 \\ 7.3 \\ 4.8 \\ 11.5 \\ \hline \end{gathered}$ | Yes $\ddagger$ |
| 14. Diamond Road (SR 49) / Truck St NB Left EB | EB Stop | A | $\begin{aligned} & 2.4 \\ & 4.2 \\ & \hline \end{aligned}$ | A | $\begin{aligned} & 2.5 \\ & 4.9 \\ & \hline \end{aligned}$ | No |
| 15. Diamond Road (SR 49) / Bradley Dr NB Left <br> EB | EB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 3.6 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.7 \\ & 7.4 \\ & \hline \end{aligned}$ | No |
| 16. Diamond Road (SR 49) / Lime Kiln Rd - Black Rice Ln <br> NB Left <br> SB Left <br> EB <br> WB | $\begin{gathered} \text { EB / WB } \\ \text { Stop } \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.7 \\ & 2.1 \\ & 5.4 \\ & 4.1 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.4 \\ & 2.6 \\ & 6.4 \\ & 6.7 \end{aligned}$ | No |
| * meets volume and delay warrant in AM and PM peak hours <br> $\dagger$ meets volume warrant in AM and PM peak hours |  | $\ddagger$ meets volume warrant in PM peak hour $\diamond$ no delay reported |  |  |  |  |

Intersection Queues. Table 3 presents information regarding current peak period queuing in lanes at signalized study intersections. In each case, the available storage has been presented along with current peak hour traffic volumes and the $95^{\text {th }}$ percentile queue length. On multiple lane approaches the longest queue amongst a group of common lanes has been noted.

Most intersections have lane storage capacity that can accommodate peak period queues. Those $95^{\text {th }}$ percentile queues with length exceeding the available storage have been highlighted. The $95^{\text {th }}$ percentile queue exceeds available storage in nine locations.

TABLE 3
EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | $\begin{gathered} \text { Capacity } \\ \text { (feet) } \\ \hline \end{gathered}$ | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue <br> (feet) | VPH | Queue <br> (feet) |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |
| NB left turn | 330 | 159 (2) | 105 | 322 (2) | 191 |
| NB through | 450 | 432 (2) | 100 | 308 (2) | 196 |
| NB right turn | 450 | 342 | 100 | 451 | 131 |
| SB left turn | 110 | 42 | 64 | 46 | 70 |
| EB left+through+right | 120 | 93 (2) | 66 | 388 (2) | 203 |
| WB left +through+right turn | 275 | 282 (2) | 159 | 522 (2) | 232 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |
| NB left turn | 160 | 390 (2) | 167 | 365 (2) | 165 |
| NB through | 360 | 600 (2) | 289 | 732 (2) | 213 |
| SB through | 520 | 446 (2) | 157 | 822 (2) | 225 |
| WB left turn | 410 | 541 (2) | 211 | 596 (2) | 220 |
| WB right turn | 410 | 333 (2) | 127 | 349 (2) | 148 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |
| NB through | 160 | 900 (2) | 206 | 879 (2) | 185 |
| NB right turn | 140 | 81 | 73 | 72 | 85 |
| SB left | 160 | 134 (2) | 192 | 323 (2) | 214 |
| SB through | 380 | 853 (2) | 353 | 1,095 (2) | 419 |
| EB left+through + right turn | 540 | 417 (3) | 137 | 779 (3) | 213 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |
| NB left turn | 150 | 23 | 56 | 51 | 67 |
| NB through | 2,300 | 846 (2) | 175 | 827 (2) | 147 |
| SB through | 140 | 1,100 (2) | 106 | 1,530 (2) | 168 |
| SB right turn | 130 | 80 | <25 | 126 | 66 |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |
| NB left turn | 250 | 37 | 68 | 57 | 84 |
| NB through | 1,000 | 855 (2) | 268 | 800 (2) | 248 |
| NB right turn | 160 | 60 | 125 | 21 | 79 |
| SB left turn | 300 | 280 | 271 | 165 | 182 |
| SB through | 2,300 | 642 (2) | 181 | 1,019 (2) | 260 |
| SB right turn | 150 | 207 | 125 | 348 | 181 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

TABLE 3 (cont'd)
EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

|  |  | AM P | Hour | PM P | Hour |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Location | Capacity (feet) | VPH | Queue <br> (feet) | VPH | Queue (feet) |
| 6. Missouri Flat Road / |  |  |  |  |  |
| NB left turn | 120 | 38 | 68 | 75 | 100 |
| SB left turn | 160 | 81 | 115 | 67 | 151 |
| 10. Missouri Flat Road |  |  |  |  |  |
| SB left turn | 600 | 191 | 153 | 625 | 238 |
| SB right turn | 600 | 154 | 72 | 291 | 93 |
| EB left turn | 160 | 320 (2) | 176 | 229 (2) | 137 |
| WB right turn | 190 | 534 | 221 | 330 | 153 |
| 12. Diamond Road (SR |  |  |  |  |  |
| SB left turn | 340 | 52 | 70 | 169 | 146 |
| SB through + right | 340 | 127 | 100 | 158 | 105 |
| NB right turn | 100 | 12 | 36 | 36 | 78 |
| NB left+through | 600 | 120 | 119 | 118 | 129 |
| EB left turn | 200 | 101 | 120 | 118 | 158 |
| WB right turn | 170 | 151 | 222 | 88 | 118 |
| WB left turn | 100 | 12 | 48 | 32 | 90 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

## PROJECT CHARACTERISTICS

The development of this project will attract traffic to the project site. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.


## Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends that the project creates.

The trip generation for this project was calculated using trip generation rates published in the Trip Generation Manual (Institute of Transportation Engineers, 9th Edition, 2012. Applicable rates are found in categories 210 (Single Family Residential) and 710 (General Office Building), as noted in Table 4.

TABLE 4 TRIP GENERATION

| Land Use | Unit Quantity | Size | Trips Per Unit |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Daily | AM Peak Hour |  |  | PM Peak Hour |  |  |
|  |  |  |  | In | Out | Total | In | Out | Total |
| Single Family Residential (LU 210) | Unit | 104 | 10.47 | 25\% | 75\% | 0.79 | 63\% | 37\% | 1.05 |
| General Office (LU 710) | KSF | 20.0 | 19.32 | 88\% | 12\% | 2.64 | 17\% | 83\% | 5.04 |
| Single Family Residential (LU 210) |  |  | 1,089 | 21 | 62 | 83 | 69 | 40 | 109 |
| General Office (LU 710) |  |  | 386 | 46 | 6 | 53 | 17 | 84 | 101 |
| Net New trips |  |  | 1,475 | 67 | 68 | 135 | 86 | 124 | 210 |

KSF - thousand square feet
Notes - no pass-by trip reduction; numbers may not add up due to rounding

Application of applicable trip generation rates yields a total of 1,475 new daily trips, with 135 new trips expected in the a.m. peak hour and 210 new trips generated during the p.m. peak hour.

## Trip Distribution \& Assignment

Two trip distribution patterns were applied to trips related to the Project. One pattern was applied to Existing and Near Term Conditions (i.e., Existing plus Project and 2019 plus Project) and another pattern was applied to Long-Term (2035) Conditions. Table 5 presents the project trip distributions.

Existing and 2019. To evaluate the traffic related effects of the Project, trips that would be generated by the Project were distributed onto the roadway network. Trip distribution simulates the geographical pattern of travel, matching trips generated by one type of land use (e.g. residential) with trips generated by other types of land uses (e.g., education, employment, and shopping). Trip distribution patterns to and from the Project were based on the previous traffic study for the project site conducted by AECOM in 2012 but adjusted to account for schoolrelated traffic. The project trip distribution pattern is shown in Figure 4 with the project traffic shown in Figure 5.

TABLE 5
PROJECT TRIP DISTRIBUTION

| Direction |  | Distribution |  |
| :---: | :--- | :---: | :---: |
|  | Route | Existing / 2019 | $\mathbf{2 0 3 5}$ |
| North | Diamond Road (SR 49) |  | $15 \%$ |
|  | Missouri Flat Road, north of US 50 | $8 \%$ | $10 \%$ |
| South | Fowler Lane | $5 \%$ | $5 \%$ |
|  | Koki Lane / Paterson Drive | $8 \%$ | $4 \%$ |
|  | SR 49 (South) | $2 \%$ | $2 \%$ |
| West | Pleasant Valley Road west of SR 49 (South) | $2 \%$ | $2 \%$ |
|  | US 50 west of Missouri Flat Road | $20 \%$ | $20 \%$ |
|  | Mother Lode Drive west of Missouri Flat Road | $2 \%$ | $2 \%$ |
|  | Forni Road west of Missouri Flat Road | $1 \%$ | $1 \%$ |
| East | US 50 east of Missouri Flat Road | $9 \%$ | $9 \%$ |
|  | Pleasant Valley Road east of Diamond Road | $14 \%$ | $14 \%$ |
| Internal along <br> Missouri Flat Road | Along Missouri Flat Road | Golden Center Drive | $8 \%$ |
|  | Total |  |  | $6 \%$ |



|  | 2 |  | 4 |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> $q_{\text {R1-1 }}$ <br> 1 (2) <br> 1 (2) |
| Forni Rd / Missouri Flat Rd |  <br> Golden Center Dr/Missouri Flat |  |  <br> SR 49 / Pleasant Valley Rd |
|  | $10 \xrightarrow{\sim}$ |  |  |
| (0) 0 <br> (3) 3 <br> Forni Rd / Pleasant Valley Rd | (0) 0 <br> (7) 8 <br> Missouri Flat/Pleasant Valley Rd | (0) 0 <br> (57) 45 <br> China Garden Rd/Pleasant Valley |  |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | Diamond Rd / Bradley Dr |  <br>  <br> Black Rice Rd/Lime Kiln Rd |
|  <br>  <br> Diamond Springs Pkwy/Project |  |  | Legend AM Peak Hour Volume PM Peak Hour Volume Stop Sign Signalized Intersection |

## PROJECT TRAFFIC IMPACTS

## Existing Plus Project Conditions

Traffic Volumes The impacts of developing the project uses on the project site have been identified by superimposing project traffic onto existing background conditions. Figure 6 displays the "Existing Plus Project" traffic volumes at each study intersection in both AM and PM peak hours.

Circulation System Improvements. Figure 6 also presents the intersection geometry and traffic controls resulting from implementation of the project's planned improvements along Diamond Springs Road. For purposes of the analysis it is assumed that a left turn lane will be added along southbound Diamond Road to provide left turn storage. The proposed access roadway will be stop controlled.

Intersection Levels of Service. Intersection Levels of Service were calculated and used as the basis for evaluating project impacts. Table 6 displays the peak hour Levels of Service at each study intersection and compares existing Levels of Service with those accompanying the project.

All intersections will continue to operate better than the minimum El Dorado County standard (i.e., LOS E or better).

Traffic Signal Warrants. Existing Plus Project traffic volumes at unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals may be needed. Two unsignalized intersections will continue to carry volumes that meet the peak hour signal warrant criteria during either peak period. These include the Missouri Flat Road / China Garden Road intersection and the Pleasant Valley Road / SR 49 (South) intersection where the peak hour signal warrant is met in both AM and PM peak periods. Two additional intersections meet the peak hour volume portion of the peak hour warrant. These include the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / Racquet Way intersection.

Intersection Queues. Table 7 identifies peak period queues assuming the addition of project trips. Project trips and the SimTraffic software may change the length of some queues. Those $95^{\text {th }}$ percentile queues with length exceeding the available storage have been highlighted. Under Existing plus Project conditions eleven locations will exceed the available storage.

## Project Access

Access is proposed via a stop control along the Project Access approach to the Diamond Road intersection. This access is projected to be the east leg of the proposed Diamond Springs Parkway / Diamond Road intersection. Emergency only vehicle access will be provided via Black Rice Lane south of the Project access intersection. The forecasted LOS for the intersection is LOS A for both the main line left turns and the side street approach.

|  |  |  | 4 <br> ㅇ |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd | US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 $q_{R 1-1}$ |
| Forni Rd / Missouri Flat Rd | (23) 7 (53) 5 (53) 18 $\underset{\sim}{\wedge}$ <br> Golden Center Dr/Missouri Flat |  |  |
|  |  |  |  |
| (86) 132 <br> (397) 333 <br> Forni Rd / Pleasant Valley Rd | Missouri Flat/Pleasant Valley Rd | (9) 11 <br> (947) 404 <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd | (13) 8 <br> (22) 6 <br> Diamond Rd / Truck S $\dagger$ | Diamond Rd / Bradley Dr |  <br> Black Rice Rd/Lime Kiln Rd |
|  <br>  <br> Diamond Springs Pkwy/Project |  |  | Legend AM Peak Hour Volume PM Peak Hour Volume Stop Sign Signalized Intersection |

## EXISTING PLUS PROJECT

TABLE 6
PEAK HOUR INTERSECTION LEVELS OF SERVICE EXISTING PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal <br> Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Existing |  | Ex Plus Project |  | Existing |  | Ex Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd / Plaza Dr | Signal | B | 16.7 | B | 16.1 | C | 27.7 | C | 27.7 | N/A |
| 2. Missouri Flat Rd/ WB US 50 ramps | Signal | B | 18.4 | B | 19.1 | B | 17.2 | B | 17.8 | N/A |
| 3. Missouri Flat Rd / EB US 50 ramps | Signal | B | 16.2 | B | 16.5 | C | 21.3 | C | 21.7 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | A | 8.5 | A | 8.8 | A | 8.5 | A | 8.9 | N/A |
| 5. Missouri Flat Rd / Forni Rd | Signal | C | 21.8 | C | 21.1 | C | 20.6 | C | 21.8 | N/A |
| 6. Missouri Flat Rd / Golden Center Dr | Signal | B | 14.9 | B | 14.8 | C | 20.2 | C | 21.5 | N/A |
| 7. Missouri Flat Rd / China Garden Rd <br> NB Left <br> SB Left <br> EB <br> WB | WB Stop | $\begin{aligned} & \diamond \\ & \mathrm{C} \\ & \mathrm{E} \\ & \mathrm{C} \end{aligned}$ | $\begin{gathered} \diamond \\ 15.2 \\ 37.4 \\ 23.9 \end{gathered}$ | $\begin{aligned} & 0 \\ & \mathrm{C} \\ & \mathrm{C} \\ & \mathrm{E} \end{aligned}$ | $\begin{gathered} \diamond \\ 16.4 \\ 19.0 \\ 35.0 \\ \hline \end{gathered}$ | $\begin{aligned} & \circ \\ & \text { B } \\ & \text { B } \\ & \text { C } \end{aligned}$ | $\begin{gathered} \diamond \\ 12.5 \\ 10.4 \\ 17.6 \\ \hline \end{gathered}$ | $\begin{aligned} & \circ \\ & \text { B } \\ & \text { B } \\ & \text { C } \end{aligned}$ | $\begin{gathered} \diamond \\ 13.9 \\ 11.9 \\ 23.9 \\ \hline \end{gathered}$ | Yes* |
| 8. Pleasant Valley Rd (SR 49) / SR-49 South | AWS Stop | B | 12.5 | B | 11.1 | C | 15.3 | C | 17.4 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{D} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 31.8 \\ 6.0 \end{gathered}$ | $\begin{aligned} & \mathrm{E} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 37.0 \\ 5.9 \end{gathered}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 11.8 \\ 6.5 \end{gathered}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 11.1 \\ 6.3 \end{gathered}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | B | 17.6 | B | 19.3 | B | 16.9 | B | 18.4 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \text { A } \\ & \text { B } \end{aligned}$ | $\begin{gathered} 1.8 \\ 13.8 \end{gathered}$ | $\begin{aligned} & \text { A } \\ & \text { B } \end{aligned}$ | $\begin{gathered} 2.2 \\ 13.0 \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.3 \\ & 8.1 \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { B } \end{aligned}$ | $\begin{gathered} 2.7 \\ 10.9 \end{gathered}$ | No |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) | Signal | B | 18.9 | C | 25.3 | B | 17.8 | C | 19.7 | N/A |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\ddagger$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 6 (cont'd)
PEAK HOUR INTERSECTION LEVELS OF SERVICE
EXISTING PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Existing |  | Ex Plus Project |  | Existing |  | Ex Plus Project |  |  |
|  |  | LOS | Average <br> Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 13. Pleasant Valley Rd / Racquet Way | NB / SB |  |  |  |  |  |  |  |  | Yes $\ddagger$ |
| NB | Stop | A | 7.1 | A | 9.8 | C | 19.2 | C | 20.0 |  |
| SB |  | A | 9.9 | B | 10.3 | A | 7.3 | A | 7.2 |  |
| EB Left |  | A | 6.2 | A | 7.1 | A | 4.8 | A | 5.1 |  |
| WB Left |  | A | 6.6 | A | 6.3 | B | 11.5 | B | 10.8 |  |
| 14. Diamond Road (SR 49) / Truck St | EB Stop |  |  |  |  |  |  |  |  | No |
| NB Left |  | A | 2.4 | A | 2.6 | A | 2.5 | A | 4.0 |  |
| EB |  | A | 4.2 | A | 4.8 | A | 4.9 | A | 5.1 |  |
| 15. Diamond Road (SR 49) / Bradley Dr | EB Stop |  |  |  |  |  |  |  |  | No |
| NB Left |  | A | 3.1 | A | 2.7 | A | 3.7 | A | 3.1 |  |
| EB |  | A | 3.6 | A | 3.6 | A | 7.4 | A | 5.0 |  |
| 16. Diamond Road (SR 49) / Lime Kiln Rd - Black | EB / WB |  |  |  |  |  |  |  |  | No |
| Rice Ln | Stop |  |  |  |  |  |  |  |  |  |
| NB Left |  | A | 3.7 | A | 4.2 | A | 5.4 | A | 5.8 |  |
| SB Left |  | A | 2.1 | A | 1.7 | A | 2.6 | A | 4.3 |  |
| EB |  | A | 5.4 | A | 6.6 | A | 6.4 | A | 7.5 |  |
| WB |  | A | 4.1 | A | 4.8 | A | 6.7 | A | 8.0 |  |
| 17. Diamond Road (SR 49) / Project Access | WB Stop |  |  |  |  |  |  |  |  | No |
| SB Left |  | --- | --- | A | 3.7 | --- | --- | A | 3.7 |  |
| WB |  | --- | --- | A | 6.3 | --- | --- | A | 8.8 |  |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\ddagger$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 7
EXISTING PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | Ex PlusProjectQueue (feet) | VPH |  |  | Ex Plus <br> Project Queue <br> (feet) |
|  |  | Existing | Project Only | Total |  | Existing | Project Only | Total |  |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 330 | 159 (2) | 0 | 159 | 97 | 322 (2) | 0 | 322 | 195 |
| NB through | 450 | 432 (2) | 5 | 437 | 95 | 308 (2) | 12 | 320 | 199 |
| NB right turn | 450 | 342 | 0 | 342 | 96 | 451 | 0 | 451 | 136 |
| SB left turn | 110 | 42 | 0 | 42 | 61 | 46 | 0 | 46 | 76 |
| EB left+through+right | 120 | 93 (2) | 0 | 93 | 67 | 388 (2) | 0 | 388 | 203 |
| WB left + through+right turn | 275 | 282 (2) | 0 | 282 | 151 | 522 (2) | 0 | 522 | 229 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB left turn | 160 | 390 (2) | 14 | 404 | 170 | 365 (2) | 25 | 390 | 166 |
| NB through | 360 | 600 (2) | 5 | 605 | 349 | 732 (2) | 12 | 744 | 275 |
| SB through | 520 | 446 (2) | 5 | 451 | 164 | 822 (2) | 9 | 831 | 223 |
| WB left turn | 410 | 541 (2) | 6 | 547 | 217 | 596 (2) | 8 | 604 | 230 |
| WB right turn | 410 | 333 (2) | 0 | 333 | 125 | 349 (2) | 0 | 349 | 142 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB through | 160 | 900 (2) | 19 | 919 | 201 | 879 (2) | 37 | 916 | 189 |
| NB right turn | 140 | 81 | 0 | 81 | 70 | 72 | 0 | 72 | 84 |
| SB left | 160 | 134 (2) | 0 | 134 | 183 | 323 (2) | 0 | 323 | 213 |
| SB through | 380 | 853 (2) | 12 | 865 | 384 | 1,095 (2) | 16 | 1,111 | 431 |
| EB left+through+right turn | 540 | 417 (3) | 14 | 431 | 156 | 779 (3) | 17 | 796 | 222 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 150 | 23 | 1 | 24 | 62 | 51 | 2 | 53 | 73 |
| NB through | 2,300 | 846 (2) | 25 | 871 | 191 | 827 (2) | 48 | 875 | 170 |
| SB through | 140 | 1,100 (2) | 25 | 1,125 | 113 | 1,530 (2) | 34 | 1,564 | 171 |
| SB right turn | 130 | 80 | 0 | 80 | <25 | 126 | 0 | 126 | 81 |

Highlighted values indicate queue length in excess of available storage

TABLE 7 (cont'd)
EXISTING PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS


## EXISTING PLUS APPROVED PROJECTS IMPACTS (2019)

The analysis of the near term 2019 cumulative condition is intended to consider the impact of this project within the context of the "Existing Plus Approved Projects" (EPAP) conditions occurring within 5 years (i.e., by 2019).

## Analysis Methodology

El Dorado County traffic study guidelines prescribe two methodologies to determine future short term traffic volumes. The two methodologies involve either 1) adding trips associated with specific approved projects located in the study area to current turning movement counts, or 2) interpolating short term growth based on information developed from long term traffic volumes projections.

Direction regarding the analysis of Year 2019 conditions was provided by Caltrans in consultation with DOT. Because the study area circulation system is influenced by regional growth, interpolation of available long term forecasts is the preferred methodology for estimating year 2019 volumes.

The approach taken to produce Year 2019 volume follows El Dorado County traffic study guidelines. The Year 2035 traffic volumes presented in the $D S E D A M L C P$ traffic study were selected as being representative of long term conditions, with adjustment of specific approach volumes. Peak hour approach volumes for 2019 were calculated using straight-line interpolation. The resulting approach growth rate at each intersection was determined to be between $5 \%$ and $9 \%$ on various intersection approaches. These volumes were developed in the preparation of The Crossing Traffic Impact Analysis prepared by KDAnderson \& Associates, Inc. in 2014.

## Year 2019 Forecasts / Conditions

Traffic Volumes. The identified short term growth rates described above were applied to the current traffic volumes at each intersection, and the resulting background base Year 2019 volumes determined. Two additional near term projects were identified by El Dorado County staff and were added to the base volumes. The two projects include Phase 1 of The Crossing and the Willow Creek Retail Center. The Crossing is located north of the Missouri Flat Road / US 50 interchange while Willow Creek is located in the northwest quadrant of the Missouri Flat Road / Forni Road intersection. 2019 No Project volumes are presented in Figure 7.

|  | 2 |  | 4 |
| :---: | :---: | :---: | :---: |
|  <br> Plaza Dr / Missouri Flat Rd | US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> qR $^{1-1}$ <br> 307 (278) <br> 153 (222) |
|  <br> Forni Rd / Missouri Flat Rd |  <br> Golden Center Dr/Missouri Flat | China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| $\underset{(424)}{ } \begin{gathered} (877 \\ (424 \end{gathered} \xrightarrow{\Delta}$ <br> Forni Rd / Pleasant Valley Rd | Missouri Flat/Pleasant Valley Rd | (9) $12 \xrightarrow{\Delta}$ (1036) 448 China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | Diamond Rd / Bradley Dr | Diamond Rd \& Black Rice Rd/Lime Kiln Rd |
|  |  |  | Legend <br> AM Peak Hour Volume <br> PM Peak Hour Volume <br> Stop Sign <br> Signalized Intersection |

Intersection Levels of Service. The identified Year 2019 volumes were used to recalculate operating Levels of Service at selected intersections. For the purpose of this analysis, no improvements to study area intersections have been assumed to occur by the Year 2019.

Table 8 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2019 condition. One unsignalized intersection, Missouri Flat Road at China Garden Road will operate at an LOS F condition along the eastbound (driveway) and westbound (China Garden Road) approaches in the AM peak hour. This intersection meets the peak hour warrant in both AM and PM peak periods.

Intersection Queues. Table 9 identifies peak period queues for the Year 2019 base condition. Approach queues are observed to increase as a result of the projected traffic increase in the next five years. Thirteen approaches are projected to exceed the available storage.

TABLE 8
PEAK HOUR INTERSECTION LEVELS OF SERVICE 2019 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal <br> Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2019 |  | 2019 Plus Project |  | 2019 |  | 2019 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd / Plaza Dr | Signal | B | 16.2 | B | 15.6 | C | 31.6 | C | 29.6 | N/A |
| 2. Missouri Flat Rd/ WB US 50 ramps | Signal | C | 20.1 | C | 20.5 | C | 25.4 | C | 27.2 | N/A |
| 3. Missouri Flat Rd / EB US 50 ramps | Signal | B | 18.7 | B | 18.9 | C | 26.1 | C | 28.4 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | A | 9.7 | B | 10.3 | B | 10.2 | B | 10.2 | N/A |
| 5. Missouri Flat Rd / Forni Rd | Signal | C | 22.6 | C | 21.5 | C | 26.2 | C | 31.5 | N/A |
| 6. Missouri Flat Rd / Golden Center Dr | Signal | B | 15.6 | B | 15.8 | C | 23.7 | C | 29.7 | N/A |
| 7. Missouri Flat Rd / China Garden Rd <br> NB Left <br> SB Left <br> EB <br> WB | WB Stop | $\begin{gathered} \diamond \\ \mathrm{C} \\ \mathrm{~F} \\ \mathrm{~F} \end{gathered}$ | $\begin{gathered} \diamond \\ 19.8 \\ 61.4 \\ 74.7 \end{gathered}$ | $\begin{gathered} \circ \\ \mathrm{C} \\ \mathrm{~F} \\ \mathrm{~F} \end{gathered}$ | $\begin{gathered} \diamond \\ 18.6 \\ 67.1 \\ 60.8 \end{gathered}$ | $\begin{gathered} \diamond \\ \mathrm{C} \\ \mathrm{C} \\ \mathrm{D} \end{gathered}$ | $\begin{gathered} \diamond \\ 15.2 \\ 16.1 \\ 32.3 \end{gathered}$ | $\begin{gathered} \diamond \\ E \\ F \\ F \end{gathered}$ | $\begin{gathered} \diamond \\ 42.3 \\ 67.2 \\ 129.5 \end{gathered}$ | Yes* |
| 8. Pleasant Valley Rd (SR 49) / SR-49 South | AWS Stop | C | 21.2 | C | 18.0 | C | 21.9 | C | 22.2 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \text { E } \\ & \text { A } \end{aligned}$ | $\begin{gathered} 38.4 \\ 6.7 \end{gathered}$ | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 53.5 \\ 6.8 \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 23.1 \\ 6.7 \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 21.6 \\ 6.4 \end{gathered}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | C | 20.4 | C | 22.5 | B | 18.4 | B | 14.1 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \text { A } \\ & \text { C } \end{aligned}$ | $\begin{gathered} 2.8 \\ 21.1 \end{gathered}$ | A C | $\begin{gathered} 3.4 \\ 15.6 \end{gathered}$ | A B | $\begin{gathered} 4.2 \\ 11.0 \end{gathered}$ | A B | $\begin{gathered} 4.5 \\ 14.6 \end{gathered}$ | No |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\ddagger$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 8 (cont'd)
PEAK HOUR INTERSECTION LEVELS OF SERVICE 2019 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal <br> Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2019 |  | 2019 Plus Project |  | 2019 |  | 2019 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) | Signal | C | 30.6 | D | 38.9 | C | 20.3 | C | 23.2 | N/A |
| 13. Pleasant Valley Rd / Racquet Way <br> NB <br> SB <br> EB Left <br> WB Left | $\begin{aligned} & \text { NB / SB } \\ & \text { Stop } \end{aligned}$ | $\begin{gathered} \mathrm{B} \\ \mathrm{E} \\ \mathrm{~A} \\ \mathrm{~B} \\ \hline \end{gathered}$ | $\begin{gathered} 14.6 \\ 41.4 \\ 9.4 \\ 10.4 \end{gathered}$ | $\begin{aligned} & \mathrm{E} \\ & \mathrm{~F} \\ & \mathrm{~B} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{aligned} & 49.5 \\ & 94.1 \\ & 11.2 \\ & 11.6 \\ & \hline \end{aligned}$ | C <br> A <br> A <br> B | $\begin{gathered} 21.8 \\ 8.3 \\ 5.0 \\ 12.3 \end{gathered}$ | $\begin{aligned} & \mathrm{C} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~B} \end{aligned}$ | $\begin{gathered} 20.8 \\ 8.1 \\ 5.3 \\ 11.6 \end{gathered}$ | Yes $\ddagger$ |
| 14. Diamond Road (SR 49) / Truck St <br> NB Left <br> EB | EB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.6 \\ & 4.1 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.4 \\ & 4.3 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.3 \\ & 4.5 \end{aligned}$ | No |
| 15. Diamond Road (SR 49) / Bradley Dr NB Left <br> EB | EB Stop | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.5 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 3.8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.7 \\ & 5.4 \\ & \hline \end{aligned}$ | No |
| 16. Diamond Rd (SR 49) / Lime Kiln Rd - Black Rice Ln <br> NB Left <br> SB Left <br> EB <br> WB | $\begin{gathered} \text { EB / WB } \\ \text { Stop } \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.8 \\ & 1.4 \\ & 5.5 \\ & 4.6 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 4.2 \\ & 1.6 \\ & 6.6 \\ & 4.9 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 4.9 \\ & 2.3 \\ & 6.7 \\ & 7.5 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{array}{r} 6.5 \\ 4.6 \\ 8.5 \\ 9.3 \\ \hline \end{array}$ | No |
| 17. Diamond Road (SR 49) / Project Access <br> SB Left <br> WB | WB Stop | ---- | --- | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.6 \\ & 6.3 \end{aligned}$ | ---- | ---- | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 9.6 \\ & \hline \end{aligned}$ | No |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\pm$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 9
2019 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue (feet) |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |
| NB left turn | 330 | 159 (2) | 99 | 324 (2) | 211 |
| NB through | 450 | 581 (2) | 117 | 567 (2) | 240 |
| NB right turn | 450 | 344 | 103 | 453 | 228 |
| SB left turn | 110 | 48 | 71 | 58 | 122 |
| EB left+through+right | 120 | 101 (2) | 77 | 404 (2) | 224 |
| WB left +through+right turn | 275 | 296 (2) | 147 | 531 (2) | 252 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |
| NB left turn | 160 | 441 (2) | 170 | 436 (2) | 168 |
| NB through | 360 | 686 (2) | 421 | 907 (2) | 343 |
| SB through | 520 | 547 (2) | 173 | 1,054 (2) | 483 |
| WB left turn | 410 | 595 (2) | 235 | 669 (2) | 252 |
| WB right turn | 410 | 393 (2) | 155 | 438 (2) | 199 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |
| NB through | 160 | 1,003 (2) | 193 | 1,049 (2) | 180 |
| NB right turn | 140 | 83 | 75 | 74 | 84 |
| SB left | 160 | 171 (2) | 207 | 409 (2) | 218 |
| SB through | 380 | 995 (2) | 406 | 1,314 (2) | 454 |
| EB left+through+right turn | 540 | 530 (3) | 178 | 929 (3) | 312 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |
| NB left turn | 150 | 27 | 80 | 62 | 91 |
| NB through | 2,300 | 934 (2) | 234 | 984 (2) | 201 |
| SB through | 140 | 1,280 (2) | 133 | 1,807 (2) | 180 |
| SB right turn | 130 | 84 | 41 | 143 | 104 |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |
| NB left turn | 250 | 46 | 97 | 69 | 111 |
| NB through | 1,000 | 964 (2) | 317 | 974 (2) | 323 |
| NB right turn | 160 | 69 | 157 | 29 | 113 |
| SB left turn | 300 | 292 | 287 | 175 | 212 |
| SB through | 2,300 | 792 (2) | 246 | 1,262 (2) | 294 |
| SB right turn | 150 | 229 | 127 | 360 | 190 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |
| NB left turn | 120 | 38 | 80 | 76 | 136 |
| SB left turn | 160 | 89 | 138 | 77 | 175 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |
| SB left turn | 600 | 220 | 174 | 704 | 223 |
| SB right turn | 600 | 173 | 98 | 321 | 123 |
| EB left turn | 160 | 355 (2) | 158 | 254 (2) | 145 |
| WB right turn | 190 | 608 | 271 | 392 | 175 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

TABLE 9 (cont'd)
2019 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue <br> (feet) |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |
| SB left turn | 340 | 52 | 81 | 181 | 173 |
| SB through+right | 340 | 141 | 124 | 173 | 129 |
| NB right turn | 100 | 13 | 55 | 39 | 73 |
| NB left+through | 600 | 133 | 152 | 129 | 143 |
| EB left turn | 200 | 113 | 143 | 130 | 184 |
| WB right turn | 170 | 163 | 256 | 92 | 159 |
| WB left turn | 100 | 13 | 67 | 34 | 90 |

Highlighted values indicate queue length in excess of available storage

## 2019 Plus Project

Intersection Levels of Service. The identified Year 2019 plus Project volumes were used to recalculate operating Levels of Service at selected intersections. Figure 8 displays the "2019 Plus Project" traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 8 displays the AM and PM peak hour Levels of Service at each study intersection in the 2019 plus Project condition. Three intersections will operate at LOS F conditions with the proposed project. These include the Missouri Flat Road / China Garden Road intersection which will continue to operate at LOS F in both AM and PM peak hours, the Pleasant Valley Road (SR 49) / Forni Road intersection which will decline to LOS F on the southbound approach and Pleasant Valley Road / Racquet Way which will decline to LOS F conditions on the northbound and southbound approaches. The Pleasant Valley Road (SR 49) / Forni Road intersection will meet the volume portion of the peak hour warrant in both AM and PM peak hours while the Pleasant Valley Road / Racquet Way intersection will meet the volume portion of the peak hour warrant in the PM peak hour.

Intersection Queues. Table 10 identifies peak period queues for the Year 2019 plus Project condition assuming the addition of project trips. Project trips will result in additional queuing throughout the study area with fourteen locations projected to exceed the available storage.

| Plaza Dr / Missouri Flat Rd | US 50 WB Ramps/Missouri Flat |  | Mother Lode Dr/Missouri Flat |
| :---: | :---: | :---: | :---: |
|  |  |  | 8 $q_{R 1-1}$ $\begin{aligned} & \leftarrow 154(224) \\ & \leftarrow \end{aligned}$ |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat |  |  |
|  |  |  |  |
| (86) 132 <br> (427) 380 <br> Forni Rd / Pleasant Valley Rd | Missouri Flat/Pleasant Valley Rd | (9) 12 <br> (1093) 493 <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | 15 |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck St | Diamond Rd / Bradley Dr |  <br>  <br> Black Rice Rd/Lime Kiln Rd |
|  |  |  | Legend AM Peak Hour Volume PM Peak Hour Volume Stop Sign Signalized Intersection |

TABLE 10
2019 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | 2019 PlusProjectQueue (feet) | VPH |  |  | 2019 PlusProject Queue(feet) |
|  |  | 2019 | Project Only | Total |  | 2019 | Project Only | Total |  |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 330 | 159 (2) | 0 | 159 | 100 | 324 (2) | 0 | 324 | 168 |
| NB through | 450 | 581 (2) | 5 | 586 | 120 | 567 (2) | 12 | 579 | 199 |
| NB right turn | 450 | 344 | 0 | 344 | 117 | 453 | 0 | 453 | 197 |
| SB left turn | 110 | 48 | 0 | 48 | 68 | 58 | 0 | 58 | 120 |
| EB left+through + right | 120 | 101 (2) | 0 | 101 | 73 | 404 (2) | 0 | 404 | 229 |
| WB left + through+right turn | 275 | 296 (2) | 0 | 296 | 143 | 531 (2) | 0 | 531 | 261 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB left turn | 160 | 441 (2) | 14 | 455 | 170 | 436 (2) | 25 | 461 | 165 |
| NB through | 360 | 686 (2) | 5 | 691 | 447 | 907 (2) | 12 | 919 | 346 |
| SB through | 520 | 547 (2) | 5 | 552 | 170 | 1,054 (2) | 9 | 1,063 | 504 |
| WB left turn | 410 | 595 (2) | 6 | 601 | 237 | 669 (2) | 8 | 677 | 243 |
| WB right turn | 410 | 393 (2) | 0 | 393 | 155 | 438 (2) | 0 | 438 | 187 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB through | 160 | 1,003 (2) | 19 | 1,022 | 199 | 1,049 (2) | 37 | 1,086 | 184 |
| NB right turn | 140 | 83 | 0 | 83 | 73 | 74 | 0 | 74 | 85 |
| SB left | 160 | 171 (2) | 0 | 171 | 205 | 409 (2) | 0 | 409 | 220 |
| SB through | 380 | 995 (2) | 12 | 1,007 | 409 | 1,314 (2) | 16 | 1,330 | 452 |
| EB left+through+right turn | 540 | 530 (3) | 14 | 544 | 177 | 929 (3) | 17 | 946 | 373 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 150 | 27 | 1 | 28 | 78 | 62 | 2 | 64 | 102 |
| NB through | 2,300 | 934 (2) | 19 | 953 | 301 | 984 (2) | 37 | 1,021 | 204 |
| SB through | 140 | 1,280 (2) | 25 | 1,305 | 131 | 1,807 (2) | 34 | 1,841 | 177 |
| SB right turn | 130 | 84 | 0 | 84 | 35 | 143 | 0 | 143 | 98 |

Highlighted values indicate queue length in excess of available storage

TABLE 10 (cont'd)
2019 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} 2019 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \end{gathered}$ | VPH |  |  | 2019 PlusProject Queue(feet) |
|  |  | 2019 | Project Only | Total |  | 2019 | Project Only | Total |  |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |  |  |  |  |
| NB left turn | 250 | 46 | 1 | 47 | 96 | 69 | 0 | 69 | 136 |
| NB through | 1,000 | 964 (2) | 27 | 991 | 309 | 974 (2) | 51 | 1,025 | 330 |
| NB right turn | 160 | 69 | 0 | 69 | 156 | 29 | 0 | 29 | 93 |
| SB left turn | 300 | 292 | 0 | 292 | 282 | 175 | 0 | 175 | 214 |
| SB through | 2,300 | 792 (2) | 27 | 819 | 240 | 1,262 (2) | 35 | 1,297 | 321 |
| SB right turn | 150 | 229 | 0 | 229 | 135 | 360 | 0 | 360 | 195 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 120 | 38 | 0 | 38 | 67 | 76 | 0 | 76 | 130 |
| SB left turn | 160 | 89 | 0 | 89 | 137 | 77 | 0 | 77 | 191 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |  |  |  |  |
| SB left turn | 600 | 220 | 37 | 257 | 203 | 704 | 50 | 754 | 217 |
| SB right turn | 600 | 173 | 0 | 173 | 94 | 321 | 0 | 321 | 122 |
| EB left turn | 160 | 355 (2) | 0 | 355 | 158 | 254 (2) | 0 | 254 | 147 |
| WB right turn | 190 | 608 | 37 | 645 | 276 | 392 | 72 | 464 | 198 |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |  |  |  |  |
| SB left turn | 340 | 52 | 10 | 62 | 85 | 181 | 17 | 198 | 190 |
| SB through+right | 340 | 141 | 48 | 189 | 176 | 173 | 88 | 261 | 200 |
| NB right turn | 100 | 13 | 0 | 13 | 53 | 39 | 0 | 39 | 82 |
| NB left+through | 600 | 133 | 3 | 136 | 172 | 129 | 4 | 133 | 143 |
| EB left turn | 200 | 113 | 45 | 158 | 178 | 130 | 57 | 187 | 211 |
| WB right turn | 170 | 163 | 10 | 173 | 269 | 92 | 12 | 104 | 179 |
| WB left turn | 100 | 13 | 0 | 13 | 56 | 34 | 0 | 34 | 94 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

## CUMULATIVE IMPACTS (2035)

The analysis of the long range 2035 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2035.

## Year 2035 Forecasts / Conditions

## Roadway Conditions

Roadways in 2035 are projected to remain with their current lane configurations. The Diamond Springs Parkway, north of China Garden Road, will connect Missouri Flat Road to Diamond Road (SR 49) and is projected to be completed by 2035. This roadway will include two through lanes in each direction with turn lanes at key intersections. Missouri Flat Road will become the west and south legs of the Missouri Flat Road / China Garden Road intersection. Missouri Flat Road south of China Garden Road will continue to include one through lane in each direction. Diamond Road, as part of the Diamond Springs parkway connection will be widened to two lanes in each direction between Diamond Springs Parkway and Pleasant Valley Road. Dual left turn lanes will be provided for northbound Diamond Road at Diamond Springs Parkway and south Diamond Road at Pleasant Valley Road. The inside lanes will allow for u-turns as through movements and left turns across Diamond Road will be prohibited in this segment.

The Missouri Flat Road / Diamond Springs Parkway intersection will include two left turn lanes and a through-right lane along the northbound approach, a left turn lane, two through lanes and a right turn lane along the eastbound approach, a single lane along the southbound approach and a left turn lane, a through lane and a through-right lane on the westbound approach. The intersection will be signalized and was analyzed as part of the 2035 conditions.

The Diamond Springs Parkway / Diamond Road intersection will include two left turn lanes and a through lane along the northbound approach, a through lane and a right turn lane along the southbound approach and a left lane and a right lane along the eastbound approach. The intersection will be signalized and was analyzed with the signal in 2035 conditions. As part of this project the Bradley Drive intersection will be modified to right-in, right-out access only. Additionally, the Diamond Road / Lime Kiln Road - Black Rice Lane will be modified to allow right-in, right-out and left-in movements only.

An intermediate intersection at Throwita Way will be constructed. This intersection will include a left turn lane, two through lanes and a right turn lane for eastbound traffic, a left turn lane, a through lane and a through-right lane for westbound traffic, a single lane for south bound traffic and a right lane and a through-left lane for northbound traffic. The intersection will be signalized and was analyzed as part of the 2035 conditions.

## 2035 Traffic Forecasts

Year 2035 traffic forecasts were based on the DSEDAMLCP traffic volumes and were expanded to account for traffic along the Diamond Springs Parkway Corridor and Diamond Road (SR 49). Traffic volumes not contained in the $D S E D A M L C P$ were developed based upon the growth rates
identified between Existing and 2035 DSEDAMLCP time periods, the Diamond Springs Parkway EIR Circulation Element prepared by Kimley Horn Associates and the Diamond Dorado Retail Center EIR Traffic Impact Analysis also prepared by Kimley Horn Associates. Intersection turning movements are presented in Figure 9.

Intersection Levels of Service. The identified Year 2035 volumes were used to recalculate operating Levels of Service at the study intersections. Table 11 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2035 condition. 2035 Synchro files developed for the $\operatorname{DESDAMLCP}$ were obtained and expanded to include study intersections that were identified for analysis for this project.

Four intersections will operate with LOS F conditions. These include the Missouri Flat Road / US 50 Westbound Ramps intersection which will operate at LOS F in the PM peak hour, the SR 49 / Pleasant Valley Road intersection which will operate at LOS F in both AM and PM peak hours, the Pleasant Valley Road / Racquet Way intersection which will operate with the southbound approach at LOS F in the AM peak hour and the Pleasant Valley Road / Forni Road intersection which will operate at LOS F along the southbound approach in the AM and PM peak hours.

Traffic Signal Warrants. Two unsignalized intersections carry volumes that meet the peak hour signal warrant criteria during either peak period. These include the Pleasant Valley Road / SR 49 (South) intersection where the peak hour signal warrant is met in both AM and PM peak periods and the Pleasant Valley Road / Racquet Way intersection where the peak hour signal warrant is met in the PM peak hour. Three additional intersections meet the peak hour volume portion of the peak hour warrant. These include the Missouri Flat Road / China Garden Road intersection, the Pleasant Valley Road / Forni Road intersection and the Diamond Road / Lime Kiln Road - Black Rice Lane intersection.

Intersection Queues. Table 12 identifies peak period queues for the Year 2035 base condition. Project trips will result in additional queuing throughout the study area with 24 locations projected to exceed the available storage. The most extensive queues are projected to occur in the vicinity of the US 50 / Missouri Flat Road interchange where the westbound US 50 off-ramp queue is projected to exceed 1,100 feet and the eastbound US 50 off-ramp is projected to exceed 1,700 feet. Additionally, the northbound queue along Missouri Flat Road at Mother Lode Drive is expected to exceed 2,200 feet.

|  |  |  | 4 <br> 웅 |
| :---: | :---: | :---: | :---: |
|  |  <br> US 50 WB Ramps/Missouri Flat | US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> qR1-1 $^{2}$ <br> 310 (351) <br> 220 (361) |
| Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat |  <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| (170) 240 <br> (573) $460 \xrightarrow{\longrightarrow}$ <br> Forni Rd / Pleasant Valley | Missouri Flat/Pleasant Valley Rd | (10) 20 <br> (810) 290 <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | $15$ |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | (0) 0 <br> (5) 1 <br> Diamond Rd / Bradley Dr |  <br> Black Rice Rd/Lime Kiln Rd |
|  | 18 | 19 | Legend |
|  <br> Diamond Springs Pkwy/Project | Missouri Flat Rd \& Diamond Springs Pkwy |  <br> Diamond Springs Pkwy \& Throwita Way | $\sigma(X X)$ PM Peak Hour Volume qR1-1 Stop Sign Signalized Intersection |

## TABLE 11

PEAK HOUR INTERSECTION LEVELS OF SERVICE
2035 PLUS PROJECT CONDITIONS

| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic <br> Signal <br> Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2035 |  | 2035 Plus Project |  | 2035 |  | 2035 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 1. Missouri Flat Rd / Plaza Dr | Signal | B | 15.5 | B | 15.8 | E | 57.3 | E | 64.5 | N/A |
| 2. Missouri Flat Rd/ WB US 50 ramps | Signal | C | 31.1 | C | 21.3 | F | 109.3 | F | 111.1 | N/A |
| 3. Missouri Flat Rd/EB US 50 ramps | Signal | C | 30.6 | C | 25.5 | E | 71.9 | E | 78.6 | N/A |
| 4. Missouri Flat Rd / Mother Lode Dr | Signal | B | 17.2 | B | 16.1 | D | 50.1 | E | 64.1 | N/A |
| 5. Missouri Flat Rd / Forni Rd | Signal | D | 41.5 | D | 39.5 | E | 59.1 | E | 65.5 | N/A |
| 6. Missouri Flat Rd/ Golden Center Dr | Signal | C | 24.2 | C | 25.1 | D | 35.2 | D | 37.1 | N/A |
| 7. Missouri Flat Rd / China Garden Rd <br> NB Left <br> SB Left <br> EB <br> WB | WB Stop | A <br> B <br> B <br> B | $\begin{gathered} 3.4 \\ 14.8 \\ 14.5 \\ 12.4 \\ \hline \end{gathered}$ | A <br> C <br> C <br> B | $\begin{gathered} 3.9 \\ 17.8 \\ 20.5 \\ 11.2 \\ \hline \end{gathered}$ | $\diamond$ <br> B <br> E <br> E | $\begin{gathered} \diamond \\ 11.1 \\ 27.9 \\ 47.9 \\ \hline \end{gathered}$ | $\diamond$ <br> B <br> D <br> F | $\begin{gathered} \diamond \\ 12.0 \\ 27.3 \\ 56.6 \\ \hline \end{gathered}$ | Yes* |
| 8. Pleasant Valley Rd (SR 49) / SR-49 South | AWS Stop | F | 58.7 | F | 55.5 | F | 70.0 | F | 68.7 | Yes |
| 9. Pleasant Valley Rd (SR 49) / Forni Rd <br> SB <br> EB Left | SB Stop | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 220.9 \\ 8.5 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 212.9 \\ 8.8 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \\ & \hline \end{aligned}$ | $\begin{gathered} 97.7 \\ 9.7 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{F} \\ & \mathrm{~A} \end{aligned}$ | $\begin{gathered} 179.0 \\ 9.9 \\ \hline \end{gathered}$ | Yes $\dagger$ |
| 10. Missouri Flat Rd / Pleasant Valley Rd (SR 49) | Signal | D | 48.9 | D | 51.8 | C | 30.6 | C | 30.3 | N/A |
| 11. Pleasant Valley Rd (SR 49) / China Garden Rd SB <br> EB Left | SB Stop | $\begin{aligned} & \text { A } \\ & \text { B } \end{aligned}$ | $\begin{gathered} 3.2 \\ 11.7 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \hline \end{aligned}$ | $\begin{gathered} 2.6 \\ 11.0 \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3.3 \\ & 7.8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 4.1 \\ & 7.8 \\ & \hline \end{aligned}$ | No |
| 12. Diamond Road (SR 49) / Pleasant Valley Rd (SR 49) | Signal | C | 26.9 | C | 26.0 | C | 22.6 | C | 22.8 | N/A |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\ddagger$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 11 (cont'd)

## PEAK HOUR INTERSECTION LEVELS OF SERVICE

 2035 PLUS PROJECT CONDITIONS| Location | Control | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  | Traffic Signal Warranted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2035 |  | 2035 Plus Project |  | 2035 |  | 2035 Plus Project |  |  |
|  |  | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay | LOS | Average Delay |  |
| 13. Pleasant Valley Rd / Racquet Way | NB / SB |  |  |  |  |  |  |  |  | Yes $\ddagger$ |
| NB | Stop | E | 41.2 | C | 24.3 | E | 41.7 | E | 46.0 |  |
| SB |  | F | 55.8 | E | 38.5 | B | 13.6 | C | 17.3 |  |
| EB Left |  | B | 11.1 | B | 12.1 | A | 6.1 | A | 6.4 |  |
| WB Left |  | A | 9.6 | B | 13.6 | B | 11.4 | B | 12.0 |  |
| 14. Diamond Road (SR 49) / Truck St | EB Stop |  |  |  |  |  |  |  |  | No |
| NB Left |  | A | 3.1 | A | 3.1 | A | 3.6 | A | 5.7 |  |
| EB |  | A | 5.6 | A | 5.8 | A | 8.9 | A | 8.5 |  |
| 15. Diamond Road (SR 49) / Bradley Dr EB right | EB Stop | A | 3.6 | A | 2.3 | A | 3.7 | A | 4.0 | No |
| 16. Diamond Rd (SR 49) / Lime Kiln Rd - Black Rice Ln | EB / WB |  |  |  |  |  |  |  |  | Yes $\dagger$ |
| NB Left |  | A | 7.8 | A | 7.1 | A | 6.8 | A | 6.9 |  |
| SB Left |  | A | 5.7 | A | 5.6 | A | 4.7 | A | 5.2 |  |
| EB right |  | A | 4.2 | A | 4.7 | A | 3.8 | A | 3.7 |  |
| WB right |  | A | 6.0 | A | 5.6 | A | 4.9 | A | 4.9 |  |
| 17. Diamond Rd (SR 49) / Diamond Springs Pkwy Project Access | Signal | C | 27.8 | C | 29.9 | C | 29.2 | C | 28.0 | N/A |
| 18. Missouri Flat Road / Diamond Springs Pkwy | Signal | C | 20.8 | C | 21.7 | C | 23.7 | C | 25.1 | N/A |
| 19. Diamond Springs Pkwy / Throwita Way | Signal | B | 14.6 | B | 13.1 | B | 17.0 | B | 16.8 | N/A |

* meets volume and delay warrant in AM and PM peak hours
$\dagger$ meets volume warrant in AM and PM peak hours
$\ddagger$ meets volume warrant in PM peak hour
$\diamond$ no delay reported

TABLE 12
2035 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue (feet) | VPH | Queue (feet) |
| 1. Missouri Flat Road / Plaza Drive |  |  |  |  |  |
| NB left turn | 330 | 160 (2) | 87 | 330 (2) | 147 |
| NB through | 450 | 655 (2) | 170 | 574 (2) | 218 |
| NB right turn | 450 | 350 | 170 | 460 | 248 |
| SB left turn | 110 | 70 | 79 | 100 | 236 |
| EB left+through+right | 120 | 130 (2) | 78 | 460 (2) | 241 |
| WB left +through+right turn | 275 | 310 (2) | 125 | 560 (2) | 390 |
| 2. Missouri Flat Road / WB US 50 ramps |  |  |  |  |  |
| NB left turn | 160 | 489 (2) | 169 | 594 (2) | 169 |
| NB through | 360 | 705 (2) | 308 | 914 (2) | 357 |
| SB through | 520 | 725 (2) | 265 | 1,265 (2) | 545 |
| WB left turn | 410 | 719 (2) | 677 | 835 (2) | 1,158 |
| WB right turn | 410 | 460 (2) | 352 | 450 (2) | 522 |
| 3. Missouri Flat Road / EB US 50 ramps |  |  |  |  |  |
| NB through | 160 | 1,094 (2) | 194 | 1,288 (2) | 188 |
| NB right turn | 140 | 90 | 99 | 80 | 85 |
| SB left | 160 | 210 (2) | 196 | 380 (2) | 198 |
| SB through | 380 | 1,234 (2) | 443 | 1,709 (2) | 422 |
| EB left+through+right turn | 540 | 649 (3) | 337 | 925 (3) | 1,728 |
| 4. Missouri Flat Road / Mother Lode Drive |  |  |  |  |  |
| NB left turn | 150 | 45 | 115 | 104 | 226 |
| NB through | 2,300 | 984 (2) | 355 | 1,208 (2) | 2,137 |
| SB through | 140 | 1,688 (2) | 168 | 2,244 (2) | 165 |
| SB right turn | 130 | 90 | 96 | 170 | 109 |
| 5. Missouri Flat Road / Forni Road |  |  |  |  |  |
| NB left turn | 250 | 80 | 224 | 110 | 286 |
| NB through | 1,000 | 1,162 (2) | 446 | 1,315 (2) | 490 |
| NB right turn | 160 | 100 | 190 | 60 | 163 |
| SB left turn | 300 | 302 | 367 | 177 | 347 |
| SB through | 2,300 | 1,162 (2) | 548 | 1,774 (2) | 528 |
| SB right turn | 150 | 269 | 229 | 357 | 235 |
| 6. Missouri Flat Road / Golden Center Drive |  |  |  |  |  |
| NB left turn | 120 | 40 | 124 | 80 | 192 |
| SB left turn | 160 | 97 | 194 | 70 | 169 |
| 10. Missouri Flat Road / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |
| SB left turn | 600 | 62 | 56 | 473 | 198 |
| SB right turn | 600 | 180 | 77 | 431 | 117 |
| EB left turn | 160 | 410 (2) | 160 | 283 (2) | 210 |
| WB right turn | 190 | 452 | 167 | 232 | 118 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

## TABLE 12 (cont'd)

2035 PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  | PM Peak Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH | Queue <br> (feet) | VPH | Queue <br> (feet) |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |
| SB left turn | 340 | 409 | 193 | 507 | 216 |
| SB through + right | 340 | 242 | 136 | 171 | 101 |
| NB right turn | 100 | 20 | 73 | 40 | 99 |
| NB left+through | 600 | 132 | 171 | 142 | 184 |
| EB left turn | 200 | 130 | 144 | 200 | 199 |
| WB right turn | 170 | 500 | 246 | 428 | 204 |
| WB left turn | 100 | 20 | 97 | 40 | 110 |
| 17. Diamond Rd (SR 49) / Diamond Springs Pkwy |  |  |  |  |  |
| NB left | 350 | 634 (2) | 366 | 466 (2) | 329 |
| SB right | 464 | 202 | 122 | 412 | 265 |
| EB left | 995 | 209 | 211 | 303 | 260 |
| EB right | 995 | 729 | 292 | 770 | 227 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |
| NB left | 275 | 712 (2) | 226 | 615 (2) | 210 |
| EB through | 1,600 | 813 (2) | 352 | 1,090 (2) | 372 |
| EB right | 250 | 450 | 217 | 864 | 310 |
| WB left | 500 | 100 | 123 | 200 | 217 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |
| NB right | 200 | 26 | 42 | 35 | 65 |
| EB left | 200 | 65 | 109 | 93 | 129 |
| EB right | 200 | 113 | 121 | 193 | 127 |
| WB left | 200 | 23 | 64 | 17 | 49 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |

## 2035 Plus Project

## Trip Distribution \& Assignment

A new trip distribution pattern was applied to trips related to the Project in the future. Table 5 presents the project trip distributions for 2035. The Long-Term scenario considers the completion of the Diamond Springs Parkway (DSP), between Missouri Flat Road and Diamond Road. Project traffic that is projected to use Missouri Flat Road and Pleasant Valley Parkway to get to the project site in the short term will be able to use DSP by 2035 to access the site directly. Figure 10 presents the modified trip distribution with DSP completed.

Intersection Levels of Service. The Year 2035 plus Project volumes were used to recalculate operating Levels of Service at the study intersections. Figure 11 displays the " 2035 Project Only" traffic volumes while Figure 12 present the " 2035 Plus Project traffic" traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 11 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2035 plus Project condition. Four intersections will operate at LOS F conditions with the proposed project. These include Missouri Flat Road / US 50 Westbound Ramps intersection which will continue to operate at LOS F in the PM peak hour, the SR 49 / Pleasant Valley Road intersection which will continue to operate at LOS F in both AM and PM peak hours, the Pleasant Valley Road / Forni Road intersection which will continue to operate at LOS F along the southbound approach in the AM and PM peak hours and the Missouri Flat Road / China Garden Road intersection which will continue to operate at LOS F along the westbound approach.

Traffic Signal Warrants. Two unsignalized intersections carry volumes that meet the peak hour signal warrant criteria during either peak period. These include the Pleasant Valley Road / SR 49 (South) intersection where the peak hour signal warrant is met in both AM and PM peak periods and the Pleasant Valley Road / Racquet Way intersection where the peak hour signal warrant is met in the PM peak hour. Three additional intersections meet the peak hour volume portion of the peak hour warrant. These include the Missouri Flat Road / China Garden Road intersection, the Pleasant Valley Road / Forni Road intersection and the Diamond Road / Lime Kiln Road - Black Rice Lane intersection.

Intersection Queues. Table 13 identifies peak period queues for the Year 2035 plus Project condition assuming the addition of project trips. Project trips will result in additional queuing throughout the study area with 26 locations projected to exceed the available storage. The most extensive queues will continue to occur in the vicinity of the US 50 / Missouri Flat Road interchange where the westbound US 50 off-ramp queue is projected to exceed 1,100 feet, the eastbound US 50 off-ramp is projected to exceed 1,800 feet and the northbound Missouri Flat Road approach to Mother Lode Drive is projected to exceed 2,500 feet.


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Plaza Dr / Missouri Flat Rd |  <br> US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 $q_{R 1-1}$ |
|  <br> Forni Rd / Missouri Flat Rd |  <br> Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat | $\begin{array}{ccc}\text { (2) } 1 \\ \text { (0) } 0 & \rightarrow & 0 \\ \text { R1-1p }\end{array}$ <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| (0) 0 <br> (3) 3 <br> Forni Rd / Pleasant Valley Rd | (4) 5 <br> (2) 3 <br> Missouri Flat/Pleasant Valley Rd | (0) 0 <br> (2) 3 <br> China Garden Rd/Pleasant Valley |  |
|  | 14 O$\rightarrow 1$ | $15 \begin{array}{cc}  \\ & \left.\begin{array}{c} \text { O} \\ \\ \\ \\ \\ \hline \end{array}\right] \\ \hline \end{array}$ |  |
|  <br> Racquet Way/Pleasant Valley Rd | Diamond Rd / Truck S $\dagger$ | (0) 0 <br> Diamond Rd / Bradley Dr |  <br> Black Rice Rd/Lime Kiln Rd |
|  | 18 | 19 |  |
|  <br> Diamond Springs Pkwy/Project | Missouri Flat Rd \& Diamond Springs Pkwy | Diamond Springs Pkwy \& Throwita Way | $\sigma(X X)$ PM Peak Hour Volume QR1-1 Stop Sign (8) Signalized Intersection |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  <br> Plaza Dr / Missouri Flat Rd | US 50 WB Ramps/Missouri Flat |  <br> US 50 EB Ramps/Missouri Flat | Mother Lode Dr/Missouri Flat |
|  |  |  | 8 <br> qR1-1 $^{1}$ <br> 311 (353) <br> 221 (363) |
|  <br> Forni Rd / Missouri Flat Rd | Golden Center Dr/Missouri Flat |  <br> China Garden Rd/Missouri Flat | (384) 321 (290) 90 $\sim$ <br> SR 49 / Pleasant Valley Rd |
|  |  |  |  |
| $\substack{\text { (170) } 240 \\ \text { (576) } 463}$ Forni Rd / Pleasant Valley Rd | $415 \text { (287) }$ <br> (392) 273 <br> Missouri Flat/Pleasant Valley Rd | $\begin{array}{r} (10) 20 \\ (812) 293 \end{array}$ <br> China Garden Rd/Pleasant Valley | Diamond Rd/Pleasant Valley Rd |
|  | 14 | $15$ |  |
|  <br> Racquet Way/Pleasant Valley Rd | (18) 7 <br> (17) 7 <br> Diamond Rd / Truck S $\dagger$ |  |  |
|  <br> Diamond Springs Pkwy/Project | 18 <br> Missouri Flat Rd \& Diamond Springs Pkwy | 19 <br> Diamond Springs Pkwy \& Throwita Way | Legend <br> $\sigma X X$ AM Peak Hour Volume <br> $F(X X)$ PM Peak Hour Volume qR1-1 Stop Sign <br> Signalized Intersection |

TABLE 13
2035 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \end{gathered}$ | VPH |  |  | 2035 PlusProject Queue(feet) |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 1. Missouri Flat Rd / Plaza Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 330 | 160 (2) | 0 | 160 | 92 | 330 (2) | 0 | 330 | 147 |
| NB through | 450 | 655 (2) | 5 | 660 | 181 | 574 (2) | 12 | 586 | 204 |
| NB right turn | 450 | 350 | 0 | 350 | 182 | 460 | 0 | 460 | 221 |
| SB left turn | 110 | 70 | 0 | 70 | 85 | 100 | 0 | 100 | 241 |
| EB left+through+right | 120 | 130 (2) | 0 | 130 | 83 | 460 (2) | 0 | 460 | 257 |
| WB left + through+right turn | 275 | 310 (2) | 0 | 310 | 121 | 560 (2) | 0 | 560 | 569 |
| 2. Missouri Flat Rd/ WB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB left turn | 160 | 489 (2) | 14 | 503 | 171 | 594 (2) | 25 | 619 | 170 |
| NB through | 360 | 705 (2) | 5 | 710 | 326 | 914 (2) | 12 | 926 | 371 |
| SB through | 520 | 725 (2) | 5 | 730 | 218 | 1,265 (2) | 9 | 1,274 | 546 |
| WB left turn | 410 | 719 (2) | 6 | 725 | 283 | 835 (2) | 8 | 843 | 1,122 |
| WB right turn | 410 | 460 (2) | 0 | 460 | 186 | 450 (2) | 0 | 450 | 515 |
| 3. Missouri Flat Rd/EB US 50 ramps |  |  |  |  |  |  |  |  |  |
| NB through | 160 | 1,094 (2) | 19 | 1,113 | 195 | 1,288 (2) | 37 | 1,325 | 192 |
| NB right turn | 140 | 90 | 0 | 90 | 94 | 80 | 0 | 80 | 90 |
| SB left | 160 | 210 (2) | 0 | 210 | 171 | 380 (2) | 0 | 380 | 197 |
| SB through | 380 | 1,234 (2) | 12 | 1,246 | 367 | 1,709 (2) | 16 | 1,725 | 429 |
| EB left+through+right turn | 540 | 649 (3) | 14 | 663 | 301 | 925 (3) | 17 | 942 | 1,873 |
| 4. Missouri Flat Rd / Mother Lode Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 150 | 45 | 1 | 46 | 127 | 104 | 2 | 106 | 223 |
| NB through | 2,300 | 984 (2) | 19 | 1,003 | 323 | 1,208 (2) | 37 | 1,245 | 2,590 |
| SB through | 140 | 1,688 (2) | 25 | 1,713 | 138 | 2,244 (2) | 34 | 2,278 | 165 |
| SB right turn | 130 | 90 | 0 | 90 | 81 | 170 | 0 | 170 | 95 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

TABLE 13 (cont'd)
2035 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{array}{\|c} 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \\ \hline \end{array}$ | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project Queue } \\ \text { (feet) } \end{gathered}$ |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 5. Missouri Flat Rd / Forni Rd |  |  |  |  |  |  |  |  |  |
| NB left turn | 250 | 80 | 1 | 81 | 222 | 110 | 0 | 110 | 328 |
| NB through | 1,000 | 1,162 (2) | 27 | 1,189 | 461 | 1,315 (2) | 51 | 1,366 | 495 |
| NB right turn | 160 | 100 | 0 | 100 | 179 | 60 | 0 | 60 | 172 |
| SB left turn | 300 | 302 | 0 | 302 | 391 | 177 | 0 | 177 | 339 |
| SB through | 2,300 | 1,162 (2) | 27 | 1,189 | 576 | 1,774 (2) | 35 | 1,809 | 544 |
| SB right turn | 150 | 269 | 0 | 269 | 226 | 357 | 0 | 357 | 235 |
| 6. Missouri Flat Rd / Golden Center Drive |  |  |  |  |  |  |  |  |  |
| NB left turn | 120 | 40 | 0 | 40 | 126 | 80 | 0 | 80 | 192 |
| SB left turn | 160 | 97 | 0 | 97 | 187 | 70 | 0 | 70 | 170 |
| 10. Missouri Flat Rd / SR 49 (Pleasant Valley Rd) |  |  |  |  |  |  |  |  |  |
| SB left turn | 600 | 62 | 0 | 62 | 58 | 473 | 0 | 473 | 193 |
| SB right turn | 600 | 180 | 2 | 182 | 81 | 431 | 6 | 437 | 126 |
| EB left turn | 160 | 410 (2) | 2 | 412 | 198 | 283 (2) | 4 | 287 | 207 |
| WB right turn | 190 | 452 | 0 | 452 | 160 | 232 | 0 | 232 | 132 |
| 12. Diamond Rd (SR 49) / Pleasant Valley Rd (SR 49) |  |  |  |  |  |  |  |  |  |
| SB left turn | 340 | 409 | 10 | 419 | 196 | 507 | 17 | 524 | 216 |
| SB through+right | 340 | 242 | 4 | 246 | 152 | 171 | 9 | 180 | 102 |
| NB right turn | 100 | 20 | 0 | 20 | 68 | 40 | 0 | 40 | 94 |
| NB left+through | 600 | 132 | 3 | 135 | 147 | 142 | 4 | 146 | 174 |
| EB left turn | 200 | 130 | 1 | 131 | 141 | 200 | 2 | 202 | 207 |
| WB right turn | 170 | 500 | 10 | 510 | 246 | 428 | 12 | 440 | 217 |
| WB left turn | 100 | 20 | 0 | 20 | 88 | 40 | 0 | 40 | 103 |

Highlighted values indicate queue length in excess of available storage

TABLE 13 (cont'd)
2035 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

| Location | Capacity (feet) | AM Peak Hour |  |  |  | PM Peak Hour |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VPH |  |  | $\begin{gathered} 2035 \text { Plus } \\ \text { Project } \\ \text { Queue (feet) } \end{gathered}$ | VPH |  |  | 2035 PlusProject Queue(feet) |
|  |  | 2035 | Project Only | Total |  | 2035 | Project Only | Total |  |
| 17. Diamond Rd (SR 49) / Diamond Springs Pkwy |  |  |  |  |  |  |  |  |  |
| NB left | 350 | 634 (2) | 0 | 634 | 297 | 466 (2) | 0 | 466 | 233 |
| SB left | 100 | 0 | 10 | 10 | 34 | 0 | 13 | 13 | 55 |
| SB right | 464 | 202 | 0 | 202 | 115 | 412 | 0 | 412 | 214 |
| EB left | 995 | 209 | 0 | 209 | 201 | 303 | 54 | 357 | 241 |
| EB right | 995 | 729 | 0 | 729 | 398 | 770 | 0 | 770 | 336 |
| WB left | 200 | 0 | 14 | 14 | 48 | 0 | 27 | 27 | 72 |
| 18. Missouri Flat Rd / Diamond Springs Pkwy |  |  |  |  |  |  |  |  |  |
| NB left | 275 | 712 (2) | 0 | 712 | 271 | 615 (2) | 0 | 615 | 220 |
| EB through | 1,600 | 813 (2) | 37 | 850 | 329 | 1,090 (2) | 50 | 1,140 | 399 |
| EB right | 250 | 450 | 0 | 450 | 220 | 864 | 0 | 864 | 299 |
| WB left | 500 | 100 | 2 | 102 | 121 | 200 | 6 | 206 | 231 |
| 19. Diamond Springs Pkwy / Throwita Way |  |  |  |  |  |  |  |  |  |
| NB right | 200 | 26 | 0 | 26 | 46 | 35 | 0 | 35 | 43 |
| EB left | 200 | 65 | 0 | 65 | 114 | 93 | 0 | 93 | 137 |
| EB right | 200 | 113 | 0 | 113 | 118 | 193 | 0 | 193 | 144 |
| WB left | 200 | 23 | 0 | 23 | 57 | 17 | 0 | 17 | 47 |
| Highlighted values indicate queue length in excess of available storage |  |  |  |  |  |  |  |  |  |

## FINDINGS / RECOMMENDATIONS / MITIGATIONS

The preceding analysis has identified project impacts that may occur without mitigation. The text that follows identifies a strategy for mitigating the impacts of the proposed project. Recommendations are identified for facilities that have deficiencies in the roadway network without the project. If the project causes a significant impact, mitigations are identified for the facility.

## Existing Conditions

All intersections operate within acceptable El Dorado County LOS thresholds. No recommendations are made.

## Existing plus Project Conditions - Mitigations

All intersections will operate within acceptable El Dorado County LOS thresholds. The following mitigations are made:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- Sidewalk should be installed along the curb returns along the east side of Diamond Road as part of Piedmont Oaks development to provide contiguous access between the project site and the Diamond Dorado Center.

Diamond Road / Project Access intersection: A left turn lane with standard Caltrans transitions on each approach and departure should be constructed along Diamond Road for left turn access into the project site. The left turn lane should be constructed back to back with the left turn lane at Bradley Drive. The left turn lane for the project should be 100 ' with the left turn lane at Bradley Drive 120' long.

No additional mitigations are made at this time.

## 2019 Conditions - Recommendations

Missouri Flat Road / China Garden Road intersection: This intersection will operate with the eastbound driveway and westbound China Garden Road approach operating at LOS F in the AM peak hour. Although the County General Plan allows LOS F conditions along Missouri Flat Road between Mother Lode Drive and China Garden Road this does not apply to the intersections. The intersection meets the peak hour traffic signal warrant and signalization of this intersection will improve the operation in the a.m. peak hour to LOS B (18.4 seconds delay).

## $\mathbf{2 0 1 9}$ plus Project Conditions - Mitigations

Missouri Flat Road / China Garden Road intersection: Under project conditions the intersection will continue to operate at LOS F conditions on the eastbound driveway and westbound approach. The project should pay their fair share of signalizing the intersection identified in the 2019 Conditions section. The fair share is project traffic divided by the difference in future and existing volumes. With Diamond Springs Parkway (DSP) being constructed in the future, traffic will shift to DSP, resulting in a net decrease in traffic by 2035 at the Missouri Flat Road / China Garden Road intersection. The fair share methodology was determined using the total volumes at the Missouri Flat Road / DSP intersection as all traffic at this intersection would travel through the Missouri Flat Road / China Garden Road if DSP were not constructed. Using this method the project is responsible for $6.41 \%$ of the project cost. With signalization the intersection will operate at LOS B (18.7 seconds) in the a.m. peak hour and LOS C (30.2 seconds) in the PM peak hour.

Pleasant Valley Road / Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in both AM and PM peak hours. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. No mitigation is recommended as part of this project.

Pleasant Valley Road / Racquet Way intersection: This intersection will operate with the southbound approach at LOS F in the AM peak hour. Installation of a traffic signal will improve the intersection operation to LOS C ( 31.4 seconds per vehicle). The project should pay their fair share of the improvement as the intersection will decline to LOS F in the 2035 No Project Condition. Using the Caltrans fair share methodology the project should pay $5.4 \%$ of the improvement.

No other mitigations are necessary.

## 2035 Conditions - Recommendations

Missouri Flat Road / US 50 Eastbound and Westbound Ramp intersections: The westbound US 50 ramp intersections will operate at LOS F conditions in 2035. A single point urban interchange (SPUI) should be considered that will combine the eastbound and westbound ramp intersections into a single intersection along Missouri Flat Road. The SPUI would consist of two through lanes and two left turn lanes at the intersection with two left lanes and two right turn lane along the eastbound and westbound off-ramps. Implementation of this new interchange will result in LOS D ( 37.5 seconds per vehicle) operation at the new intersection. The County is
currently undertaking the Missouri Flat Area Master Circulation and Funding Plan (MC\&FP) Phase II analysis which will provide a mechanism for the County to fund improvements to the U.S. Highway 50/Missouri Flat Road Interchange and adjacent arterials and collector roads.

Pleasant Valley Road/ SR 49 intersection: This intersection will operate at LOS F conditions in the AM peak hour ( 58.7 seconds per vehicle) and the PM peak hour ( 70.0 seconds per vehicle). As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road.

Pleasant Valley Road/ Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in the AM and PM peak hour. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road.

Pleasant Valley Road/ Racquet Way intersection: The southbound approach of this intersection will operate at LOS F conditions in the AM peak hour ( 55.8 seconds per vehicle). The intersection meets the traffic volume section of the peak hour signal warrant in the AM peak hour and both delay and volume sections of the warrant in the PM peak hour. Signalization of this intersection will improve the operation to an LOS B condition (19.7 seconds per vehicle) in the AM peak hour.

## $\mathbf{2 0 3 5}$ plus Project Conditions - Mitigations

Missouri Flat Road / US 50 Eastbound and Westbound Ramp intersections: The westbound US 50 ramp intersections will both operate at LOS F conditions in 2035. A single point urban interchange (SPUI) should be considered that will combine both ramp intersections into a single intersection along Missouri Flat Road. The SPUI would consist of two through lanes and two left turn lanes at the intersection with two left lanes and two right turn lane along the eastbound and westbound off-ramps. Implementation of this new interchange will result in LOS D (38.6 seconds per vehicle) operation at the new intersection.

The County is currently undertaking the Missouri Flat Area Master Circulation and Funding Plan (MC\&FP) Phase II analysis which will provide a mechanism for the County to fund improvements to the U.S. Highway 50/Missouri Flat Road Interchange and adjacent arterials and collector roads. Since there is no funding mechanism in place the project should pay their fair share of the improvements.

The project should pay their fair share of the improvement as the intersection will decline to LOS F in the 2035 No Project Condition. Using the Caltrans fair share methodology the project should pay $3.2 \%$ of the improvement.

Missouri Flat Road / China Garden Road intersection: Under project conditions the intersection will continue to operate at LOS F conditions on the eastbound driveway and westbound approach. The intersection was identified for signalization in the 2019 scenario. With signalization the intersection will operate at LOS A (9.7 seconds) in the PM peak hour.

Pleasant Valley Road/ SR 49 intersection: This intersection will operate at LOS F conditions in the AM peak hour ( 55.5 seconds per vehicle) and the PM peak hour ( 68.7 seconds per vehicle). As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. Since there is no defined project at this time there are no mitigations required for the project.

Pleasant Valley Road/ Forni Road intersection: This intersection will operate with the southbound Forni Road approach operating at LOS F in the AM peak hour. The volume portion of the peak hour signal warrant is met in both AM and PM peak hours. A traffic signal is not recommended at this time due to proximity of this intersection to the Pleasant Valley Road / SR49 South intersection. This intersection is under Caltrans jurisdiction. As noted in the Diamond Dorado Traffic Impact Analysis prepared by Farhad \& Associates in 2010 Caltrans has indicated that a traffic signal should not be installed at this location until the Pleasant Valley Road / Forni Road intersection and the Pleasant Valley Road / SR-49 South intersection is realigned to constitute one intersection. Another possible solution may include a roundabout with the realignment of Pleasant Valley Road with SR 49 and Forni Road. Since there is no defined project at this time there are no mitigations required for the project.

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## APPENDICES

(under separate cover)

# APPENDIX <br> FAIR SHARE PERCENTAGES \& COSTS 

(Future + Project Volumes) - Future<br>(Future + Project) - Existing

US 50 Eastbound - Westbound Ramps / Missouri Flat Road (Single Point Interchange)

| AM | $\frac{4,201-4,170}{4,201-3,060}$ | $\frac{5,764-5,710}{5,764-4,222}$ |
| :--- | :--- | :--- |
|  | $=2.7 \%$ | $=3.5 \%$ |

Average Fair Share Percentage: 3.1\%

## Pleasant Valley Road / Racquet Way

| AM | $\frac{1,679-1,659}{1,679-1,243}$ | $\frac{2,013-1,984}{2,013-1,544}$ |
| :--- | :--- | :--- |
|  | $=4.6 \%$ | $=6.2 \%$ |

Average Fair Share Percentage: 5.4\%

Missouri Flat Road / China Garden Road

| AM | $\frac{3,197-3,109}{3,197-1813}$ | PM |
| ---: | :--- | ---: |
| $=-6.36 \%$ | $\frac{3,967-3,430}{3,967-2,001}$ |  |
|  | $=-6.46 \%$ |  |

Average Fair Share Percentage: 6.41\%


[^0]:    Highlighted values indicate queue length in excess of available storage

[^1]:    $\dagger$ meets volume portion of warrant in AM and PM peak hours
    Red indicated threshold exceeded

[^2]:    Zone wide Queuing Penalty: 1358

[^3]:    Zone wide Queuing Penalty: 1519

[^4]:    Zone wide Queuing Penalty: 1391

[^5]:    Zone wide Queuing Penalty: 1542

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