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## MEMORANDUM

| Date: | March 31, 2016 |
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|  |  |
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| From: | CIP \& TIM Fee Update: Western Slope |
| Project: | Draft Technical Memorandum 2-3: Existing and Future Deficiency and Nexus Assessment |

This memorandum summarizes the existing and future deficiency analysis including the Mitigation Fee Act (MFA) nexus justification for the improvement concepts to be advanced as part of the Major Capital Improvement Program (CIP) \& Traffic Impact Mitigation (TIM) Fee Update. The analysis includes results for: the existing conditions and future year Amended General Plan (GP) deficiency assessments; a capacity threshold analysis to determine the timing of when the improvements will be needed; the nexus fair share assessments for each recommended capital improvement category; and, per Assembly Bill (AB) 1600, a fair share discount for developments that meet Smart Growth criteria.

The subsequent sections in this memorandum describe the following:

- Introduction
- Traffic Analysis Methodology
- Traffic Analysis Assumptions
- Level of Service Standards
- Roadway Segment Analysis
- Interchange Analysis
- Parallel Facility Analysis
- Existing Operations Results
- Amended General Plan Operations Results
- Recommended TIM Fee CIP Improvements
- Capacity Threshold Analysis
- AB1600 Nexus: Trip Allocation
- AB1600 Nexus: Other Programs
- Discounted Fair Share


## INTRODUCTION

The existing and future deficiency analysis was performed based on the tools, methodologies and assumptions described in this memorandum. These are also described as part of Draft Technical Memorandum 2-1: Analysis Methodology. The same tools and methodologies were applied, as applicable, to the capacity threshold analysis and fair share nexus trip allocation analysis described in subsequent sections of this memorandum.

## TRAFFIC ANALYSIS METHODOLOGY

This section describes the approaches, tools, and methods used in the analysis.

## Level of Service (LOS)

Circulation Policy TC-Xd of the El Dorado County General Plan provides level of service standards for County-maintained roads and state highways. LOS is a grading system that indicates the quality of service motorists experience on roadway facilities such as intersections or along roadway segments. LOS is a qualitative measure of the effect of a number of factors, including delay, vehicle speeds and travel time, traffic interruptions, freedom to maneuver, driving comfort and convenience. Levels of Service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of Service (LOS) "A" through "E" generally represents traffic volumes less than or at roadway capacity, while LOS "F" represents over capacity and/or forced flow conditions.

## County Roadways

Roadway segment LOS was determined by comparing traffic volumes on the study roadway segments with peak hour LOS capacity thresholds. The planning level capacity thresholds for different roadway classifications are shown in Table 1. These capacity thresholds are calculated based on the methodology contained in the Highway Capacity Manual (Transportation Research Board, 2010) (HCM 2010).

Table 1. Local Roadways Level of Service LOS Criteria

| Functional Classification |  | Number of | Planning Level Volume Threshold (vehicles per hour) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LOS B | LOS C | LOS D | LOS E |
| Arterial, Divided | 4 |  | - | 1,850 | 3,220 | 3,290 |
|  | 6 |  | - | 2,760 | 4,680 | 4,710 |
| Arterial, Undivided | 2 |  | - | - | 850 | 1,540 | 1,650 |
|  | 4 | - | - | 1,760 | 3,070 | 3,130 |
| Multi-Lane Highway | 4 | - | 2,240 | 3,230 | 4,250 | 4,970 |

## Notes:

Two-lane highway (and arterial 2-lane) thresholds are based on HCM 2010, Exhibit 15-30, Class II Rolling, . 09 K-factor, and D-factor of 0.6
Arterial volume thresholds are based on HCM 2010, Exhibit 16-14, K-factor of 0.09, posted speed $45 \mathrm{mi} / \mathrm{h}$
Volumes are for both directions

Volume thresholds for 3-lane and 5-lane arterials were derived by linear interpolation between the 2and 4-lane and between 4- and 6-lane thresholds, respectively. Similarly, the volume thresholds for a 7 -lane or more arterial will be calculated by linear extrapolation between 4 -lane and 6 -lane volumes.

## State Highways

State highway LOS was determined using the methodologies for freeway and multilane highways and two-lane highways outlined in the HCM 2010, Chapters 11, 14, and 15, respectively. For freeway and multilane highways density of the traffic stream determines LOS. Density measures the average proximity of vehicles to each other in the traffic stream expressed in passenger cars per mile per lane (pcpmpl) of roadway. Freeway and multilane highways were evaluated using the HCM 2010 compatible spreadsheet models.

For two-lane highways, the LOS calculation is dependent on the class of the roadway. Class I two-lane highways are highways where motorists expect to travel at high speeds. Class II two-lane highways are lower speed highways and serve scenic routes or areas of rugged terrain. Class III two-lane highways serve moderately developed areas with higher densities of local traffic and side-street access. For Class II highways, LOS is determined based on the percent time spent following (PTSF). This measure is calculated as the percentage of vehicles traveling at headways of less than three seconds. For Class III highways, the percent of vehicles traveling at free-flow speed (PFFS) conditions is used to determine LOS. This measure represents the ability of vehicles to travel at the posted speed limit. The two-lane highway analysis will be performed using the Highway Capacity Software (HCS).

Table $\mathbf{2}$ and Table $\mathbf{3}$ show the segment LOS criteria for multilane and two-lane highways, respectively.
Table 2. Multi-Lane State Highways LOS Criteria

| LOS | Free Flow Speed (mi/h) | Density (pcpmpl) |
| :---: | :---: | :---: |
|  | All | $>0-11$ |
| B | All | $>11-18$ |
| C | All | $>18-26$ |
| D | All | $>26-35$ |
|  | 60 | $>35-40$ |
| E | 55 | $>35-41$ |
|  | 50 | $>35-43$ |
|  | 45 | $>35-45$ |
|  |  |  |
|  | 60 | Demand Exceeds Capacity |

Table 3. Two-Lane State Highways LOS Criteria

| LOS | Class II Highways: Percent Time Spent <br> Following (\%) | Class III Highways: Percent Free-Flow <br> Speed (\%) |
| :---: | :---: | :---: |
| A | $0-40$ | $>91.7$ |
| B | $>40-55$ | $>83.3-91.7$ |
| C | $>55-70$ | $>75.0-83.3$ |
| D | $>70-85$ | $>66.7-75.0$ |
| E | $>85$ | $\leq 66.7$ |
| Based on Highway Capacity Manual, Transportation Research Board, Washington D.C., 2010, Exhibit 15-3 |  |  |

US 50 mainline segments were evaluated using the basic freeway methodologies contained in the HCM 2010. As previously described, the US 50 LOS will be reported for each freeway segment based on density and expressed in passenger cars per mile per lane (pcpmpl) of roadway.

Given a limitation of the latest Highway Capacity Software (HCS 2010) for evaluating special purpose lanes (e.g., HOV lanes, auxiliary lanes, truck climbing lanes) freeway mainline segments were evaluated using the HCS 2010 software compatible spreadsheet models. The freeway LOS criteria are provided in Table 4.

Table 4. Freeway Mainline Level of Service (LOS) Criteria

| LOS | Density (pcpmpl) |
| :---: | :---: |
| A | $\leq 11$ |
| B | $>11-18$ |
| C | $>18-26$ |
| D | $>26-35$ |
| E | $>35-45$ |
| F | $>45$ or Demand $>$ Capacity |
| Based on Highway Capacity Manual, , ransportation Research Board, Washington D.C., 2010, Exhibit 11-5 |  |

As description of all key generalized operational parameters and operational analysis assumptions are listed in the following section.

## TRAFFIC ANALYSIS ASSUMPTIONS

Generalized operational parameters that will be used for the traffic analysis are provided below:
Ideal Saturation Flow Rate: Freeway General Purpose Lanes: 2,350 vehicles per hour per lane (vphpl); HCM 2010 Exhibit 10-5;
Freeway HOV Lanes: $1,650^{1}$ vehicles per hour per lane (vphpl); Freeway Auxiliary Lanes > 1 mile: $900^{2}$ vphpl
Freeway Auxiliary Lanes < 1 mile: 400 vphpl
Base Free Flow Speeds:
Peak Hour Factor (PHF):
All: Posted speed limit plus 5 mph

Freeway mainline:
Existing: where counts exist: Caltrans Performance Measurement System (PeMS) and Caltrans Published Volumes; where counts do not exist: 0.92;
Future: 0.92
State Highways:
Existing: where counts exist: PeMS and Caltrans Published Volumes; where counts do not exist: 0.92;
Future: 0.92

Peak Hour Directional (D) Factor:
Peak Hour (K) Factor:
Traffic Volumes:

Existing: Caltrans PeMS or Caltrans/County published reports (average weekday)
Future: Same as Existing average weekday if available - other: El Dorado County travel demand model projected D Factor

Existing: PeMS or Caltrans/County published reports (average weekday)
Future: Same as Existing average weekday if available - other: El Dorado County travel demand model projected K Factor

Annual Average Weekday Conditions

Existing: Freeways/State Highways: Caltrans Annual Average Daily Traffic (AADT) published volumes adjusted to average weekday peak hour condition via published K and D factors. US

[^0]${ }^{2} 900$ vphpl is a typical default assumption for auxiliary lanes greater than 1 mile and has been accepted by Caltrans in previous reports. See SC101 HOV Report June 2010.

$\begin{array}{ll}\text { Lane Width: } & \text { All: } 12 \text { feet, or consult Caltrans or County Staff } \\ \text { Driver Population Factor: } & \text { All: } 1.00 \text { - local drivers } \\ \text { Ramp Density (ramps/mi): } & \text { Freeway mainline: Aerial measured } \\ \text { Access Density (points/mi): } & \text { State Highways/Local Roadways: Aerial measured } \\ \text { Heavy Vehicles: } & \begin{array}{l}\text { Freeway/State Highways- Caltrans published Truck AADT data, } \\ \text { or } 5 \text { percent default (4\% on US 50); } \\ \text { State Highways/Local Roadways }-5 \text { percent default, or consult } \\ \text { Caltrans or County staff }\end{array}\end{array}$
50 between County line and Ponderosa Road: higher volumes between Caltrans AADT published volumes adjusted to average weekday and Caltrans PeMS average weekday (April)

Existing: Local Roadways: County published data
Future: Counts adjusted based on El Dorado County travel demand model growth between 2015 baseline to 2035 forecast horizon per National Cooperative Highway Research Program 255 method (NCHRP 255) (NCHRP, 1982)

## LEVEL OF SERVICE STANDARDS

The following criteria are established to determine whether the vehicular traffic on a roadway facility exceeds the standard operating conditions.

## County Roadways

Circulation Policy TC-Xd of the El Dorado County General Plan provides level of service standards for County-maintained roads and state highways as follows:

Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table.

Roadways in the community regions are evaluated against LOS E standard, while those in the rural regions and rural centers are analyzed against LOS D. Figure 1 shows the level of service thresholds for local roadways, with exceptions listed in the Table TC-2 of the County's Circulation Element.

## State Facilities

County's Policy TC-Xd is applicable not only to the County roadways, but also to the state facilities. As such, traffic conditions for state facilities within the unincorporated areas of the County shall not be worse than LOS E in the community regions and LOS D in the rural center and rural regions, except to the locations specified in Table TC-2.

## U.S. Highway 50

Table 5 presents LOS thresholds used for US 50. These standards are consistent with the concept LOS established by Caltrans in the Transportaion Concept Report and Corridor System Management Plan, the County, and Table TC-2 of the 2004 El Dorado County General Plan.

Table 5. US 50: Level of Service Thresholds

| Location Description | Begin Post <br> Mile | End Post <br> Mile | Level of Service <br> Threshold |
| :--- | :---: | :---: | :---: |
| Sacramento/El Dorado County Line to Latrobe Road | 0 | 0.857 | LOS E |
| Latrobe Road to Cambridge Road | 0.857 | 4.962 | LOS D |
| Cambridge Road to Shingle Springs Drive | 4.962 | 8.564 | LOS E |
| Shingle Springs Drive to El Dorado Road | 8.564 | 14.011 | LOS D |
| El Dorado Road to Canal Street | 14.011 | 17.52 | LOS E |
| Canal Street to Mosquito Road | 17.52 | 18.517 | LOS F |
| Mosquito Road to Point View Drive | 18.517 | 20.296 | LOS E |
| Point View Drive to Old Highway, Camino | 20.296 | 23.957 | LOS D |
| Old Highway, Camino to Old Carson Road | 23.957 | 34.219 | LOS E |
| Old Carson Road to Ice House Road | 34.219 | 39.772 | LOS D |
| Ice House Road to Echo Lake Road | 39.772 | 65.619 | LOS F |

Source: US 50 Transportation Concept Report and Corridor System Management Plan, Caltrans District 3, June 2014, 2004 El Dorado County General Plan, July 2004.

## State Route 49

In the State Route 49 Transportation Concept Report (Caltrans, 2000), the concept LOS is F south of the community of El Dorado and through the City of Placerville. All other segments have a concept LOS E. Since the County adopted exceptions for this roadway, the County's LOS standard for rural community (LOS D) was used as the operational criteria for segments from Amador/El Dorado County Line to Union Mine Road and from SR 193 (south) to SR 193 (north).

## State Route 193

In the State Route 193 Transportation Concept Report (Caltrans, 2011), the concept LOS through El Dorado County is LOS D. This Caltrans concept LOS is consistent with the County standard.

## State Route 153

The State Route 153 Transportation Concept Report (Caltrans, 2011) established a concept LOS of E for SR 153 within El Dorado County. Since the roadway runs through a defined rural community, the County's LOS D standard was used as the operational standard for this analysis.

Figure 1. Level of Service Thresholds for Roadways


Service Layer Credits: Sources: Esti. DeLorme. NAVTEQ. USGS, Intermap
IPC. NRCAN. Esri Japan, METI, Esri China (Hong Kong). Esn (Thailand).
TomTom. 2012

County LOS Standards El Dorado County, California

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## ROADWAY SEGMENT ANALYSIS

This section provides the operations results by facility type. The facility types include County arterial roadways and state highways including freeways, multilane highways, and two-lane highways. A total of 57 County roadways were analyzed spanning nearly 150 segments. The entire state highway system was analyzed (i.e., US 50, SR 49, SR 193, SR 153) spanning 60 segments. Selection of roadways and roadway segmentation was based on a number of criteria including:

- roadway/segment was analyzed in previous TIM fee analysis;
- roadway/segment is currently listed in the County's current Capital Improvement Program;
- roadway/segment was included as part of the County's Travel Demand Model baseline validation analysis;
- roadway/segment is a critical high volume location with known congestion issues; and,
- roadway/segment is considered to have future importance for accommodating planned development growth.

Given the need for all future traffic projections to be adjusted based on the NCHRP $255^{3}$ guidance principles, the choice of County roadway segments to analyze was contingent upon the availability of weekday (Tuesday-Thursday) daily and peak hour traffic counts (less than 3 years old). To ensure that "raw" model volumes would not form the basis for determining roadway operations, new traffic counts were performed by the County for all roadways that met the above criteria but did not have a recent traffic count. For US 50, average weekday bi-directional peak hour volumes were based on the most recent Caltrans PeMS counts taken during April/May 2014 including AM/PM peak directional splits (D Factor).

All state facilities were analyzed based on the HCM 2010 operational analysis methodology and LOS criteria described in the previous section. All local County roadways were analyzed based the HCM 2010 planning method and LOS criteria, also described in the previous section.

The analysis scenarios include:

- 2015 Baseline (Existing) Scenario - To ensure that the future traffic growth resulting from new development growth is not double counted, all built and occupied permits between 2010 (model validation baseline year) and January $1^{\text {st }} 2015$ were reflected in the baseline travel demand model land use to establish an updated model analysis baseline. The 2010 baseline model network was also modified to include only infrastructure improvements open and operational by January $1^{\text {st }} 2015$.
- 2035 Amended General Plan Land Use Scenario - This scenario reflects the approved allocation of growth in the County's General Plan, including the recently adopted Targeted

[^1]
#### Abstract

General Plan Ammendment and Zoning Ordinance Update (TGPA-ZOU) project. This assumes growth occurring at approximately 1 percent annual average growth rate over the 20-year planning horizon (2015-2035) with a $75 \%$ allocation to community regions and $25 \%$ allocation to rural regions ( $75 / 25$ split). To establish a 2035 baseline network, the 2015 baseline model network was modified to only include infrastructure improvements either completed or under construction by January $1^{\text {st }} 2015$.


## Roadway Segment Volumes

Before "raw" model output is considered suitable for operational determinations, post-processing adjustments must be performed. The recommended procedure is based on the NCHRP 255. NCHRP 255 adjustments entail using model generated link-based growth factors (computed variation between base year and forecast year model link volumes) to adjust baseline traffic counts to reflect future conditions. For each count location, traffic growth estimates were generated using both the Ratio and the Difference method and taking the average between the two methods.

The baseline traffic counts, the 2035 future year "raw" volumes and the NCHRP 255 adjusted segment volumes used to determine future year operations are provided in Attachment A. For reporting purposes, forecasted volumes are rounded to the nearest ten.

All analysis scenarios reflect AM/PM peak hours during average weekday (Tues-Thurs) traffic conditions. Peak hours are confined to the weekday peak commute hour periods of 7:00 AM to 9:00 AM in the morning and between 4:00 PM - 6:00 PM in the afternoon. These forecasts do not reflect peak season or peak weekend traffic conditions which are primarily dominated by interregional traffic which is not appropriate for analysis of a local fee program.

## Roadway Segment Capacity

Roadway segment capacities were developed by multiplying the number of through lanes for a given roadway segment with the ideal saturation flow rate parameters (i.e., ideal lane capacity) provided in the Traffic Analysis Assumptions section.

For the eastbound segment of US 50 from the County Line to Bass Lake, the special purpose lane designations allow for some interpretation. Caltrans defines this segment more conservatively as 2 General Purpose Lanes, 1 HOV Lane, and 1 Auxiliary Lane. The County considers the functionality of the segment to operate as having 3 General Purpose Lanes and 1 HOV Lane. Both were analyzed with the most conservative capacity assumption results considered herein.

Another special case is Green Valley Road east of Francisco Drive to east of Silva Valley Parkway. This section of Green Valley Road is comprised of both two- and four-lane sections. Given that this segment is primarily a two-lane facility between Francisco Drive and east of Silva Valley Parkway it was documented as such herein.

Given the uncertainty associated with long-term 20-year travel forecasts, a 3 percent capacity buffer check was performed. If the 2035 forecasted volume on a given roadway segment is within 3 percent of the capacity for that segment, a deficiency was identified.

## INTERCHANGE ANALYSIS

There are a total of 21 interchanges operating along US 50 in El Dorado County including:

1. El Dorado Hills Boulevard Interchange
2. Silva Valley Parkway Interchange (under construction)
3. Bass Lake Road Interchange
4. Cambridge Road Interchange
5. Cameron Park Drive Interchange
6. Ponderosa Road Interchange
7. Shingle Springs Drive Interchange
8. Red Hawk Parkway Interchange
9. Greenstone Road Interchange
10. Placerville Drive (West) Interchange
11. Ray Lawyer Drive Interchange
12. Placerville Drive (East) Interchange
13. Mosquito Road Interchange
14. Schnell School Road Interchange
15. Point View Drive Interchange
16. Smith Flat Road Interchange
17. Cedar Grove/Camino Interchange
18. Pollock Pines/Cedar Grove Interchange
19. Sly Park Road Interchange
20. El Dorado Road Interchange
21. Missouri Flat Road Interchange

For interchanges, the under- or over-crossing service roads were analyzed based on the roadway segment analysis described above. However, a more detailed screening assessment was performed for the eight interchanges currently included in the existing TIM Fee CIP. These interchanges include:

- El Dorado Hills Boulevard Interchange
- Silva Valley Parkway Interchange
- Bass Lake Road Interchange
- Cambridge Road Interchange
- Cameron Park Drive Interchange
- Ponderosa Road Interchange
- El Dorado Road Interchange
- Missouri Flat Road Interchange

More detailed operationally-based CIP traffic studies have already been completed for these interchanges. As such, a peak hour volume screening assessment was used to reconfirm the prior deficiency analysis determinations. Given that these interachange operational studies were based on the previous version of the El Dorado County travel demand model, the screening assessment focused on the comparative differences between the future year forecasts generated by the previous model and the current updated model at each interchange. For each interchange (both TIM Fee CIP and non-TIM Fee CIP interchange), ramp and interchange over-crossing link volumes were compared. If the current model yielded equal or higher volumes (in absolute terms) or an equal or higher traffic
growth rate at one or more ramps and/or overcrossing, the previously identified deficiency was considered reaffirmed and the previously identified CIP improvements carried forward. If the screening assessment yielded holistically lower forecasted volumes at a given interchange, a new operationally-based analysis would then be performed to determine whether an LOS deficiency would be identified by 2035.

## PARALLEL FACILITY ANALYSIS

A determination for the need to include parallel facilities into the TIM Fee CIP list was based on the deficiency assessment for US 50 and County roadways on a case by case basis. Given that parallel facilities provide corridor capacity and provide congestion relief to the primary deficient facility, parallel facility improvements are considered candidates for TIM Fee CIP improvements.

## EXISTING OPERATIONS RESULTS

## Existing Operations Results for State Facilities

The LOS analysis results for freeways, multilane highways, and two-lane highways are provided in Attachment B (Tables B-1, B-2, B-3). Based on the results, all state highway facilities are shown to operate within established LOS standards during average weekday AM and PM peak hour conditions.

## Existing Operations Results for Local Roadways

The LOS analysis results for local roadways are presented in Attachment B (Table B-4). Given its geometric and operating characteristics, Green Valley Road segments\# 51 and 53-62 were analyzed using the HCM 2010 operational method. No deficiencies were identified for study segments under existing conditions except for the following location:

- Green Valley Road west of Sophia Parkway: AM and PM peaks

Given this roadway segment is identified as an existing deficiency, only the share attributable to new growth can be applicable to the TIM Fee Program. Therefore, the TIM Fee Program includes only the cost attributable to new development, calculated as the ratio of traffic growth to the existing traffic volume.

## 2035 AMENDED GENERAL PLAN OPERATIONS RESULTS

## Amended General Plan Operations Results for State Facilities

Under the 2035 General Plan scenario, the LOS analysis results for freeways, multilane highways, and two-lane highways are provided in Attachment C (Tables C-1, C-2, C-3).

All state facilities except for the US 50 segments listed below are projected to meet the LOS threshold:

- El Dorado/Sacramento County Line to Latrobe Road: westbound direction in the AM peak and eastbound in the PM peak ${ }^{4}$
- Bass Lake Road to Latrobe Road: westbound direction in the AM peak
- Bass Lake Road to Cambridge Road: eastbound direction in the PM peak

All segments on SR 49, SR 193, and SR 153 are projected to operate acceptabley.

## Amended General Plan Operations Results for Local Roadways

The LOS analysis results for local roadways under the 2035 General Plan scenario are shown in Attachment C (Table C-4).

The following local roadways are projected to exceed the County's LOS standards assuming no other improvements by 2035:

- Cameron Park Drive south of Hacienda Drive: PM peak
- Green Valley Road west of Sophia Parkway: AM and PM peaks
- Green Valley Road east of Francisco Drive ${ }^{5}$ : AM and PM peaks
- Missouri Flat Road south of China Garden Road: PM peak
- Latrobe Road north of Golden Foothill Parkway: AM and PM peaks
- White Rock Road west of Windfield Way: PM peak
- White Rock Road at Sacramento/El Dorado County Line: PM peak
- White Rock Road east of Latrobe Road: PM peak

All the above roadway segments are located in designated community regions.

## Parallel Facility Deficiency Analysis Results

Based on identified US 50 mainline and several County roadway deficiencies, the following roadway extensions were analyzed.

- Saratoga Way (based on providing parallel capacity to the US 50 segment - County Line to El Dorado Hills Boulevard deficiency)

[^2]- Country Club Drive (based on providing parallel capacity to the US 50 segment - El Dorado Hills Boulevard to Cambridge Road deficiency)
- Diamond Springs Parkway (based on providing parallel capacity to the Missouri Flat Road deficiency)
- Latrobe Connection (based on providing parallel capacity to the White Rock Road and Latrobe Road deficiencies)
- Headington Road (based on providing parallel capacity to the Missouri Flat Road deficiency)

Assuming these roadways improvements are in place, several deficient segments were shown to operate acceptably due to redistribution of traffic. These facilities were therefore removed from the TIM Fee CIP list.

## Summary for Roadways Deficiencies

A summary of all deficient roadways is shown in Table 6. Under existing conditions, all local roadway segments analyzed were shown to operate within County standards except the Green Valley Road segment west of Sophia Parkway. All state facilities were also determined to operate within the established General Plan LOS standards. Under 2035 conditions (assumes 2035 General Plan land use and 2015 roadway network), three segments of US 50 and eight local roadway segments were projected to exceed LOS standards. Assuming additional parallel facility improvements, the number of US 50 deficiencies was reduced to two segments and the number of local roadway deficiencies was reduced to five segments.

Table 6. Summary for Deficiency Roadways by Scenario

| Facility Type | Baseline <br> Roadway | 2035 Amended General Plan Roadway | 2035 Amended General Plan Roadway with Parallel Capacity Improvements |
| :---: | :---: | :---: | :---: |
| State Highways | None | 1. US 50 (EI Dorado/ Sacramento County Line to Latrobe Road) <br> 2. US 50 (Latrobe Road to Bass Lake Road) <br> 3. US 50 (Bass Lake Road to Cambridge Road) | 1. US 50 (Latrobe Road to Bass Lake Road) <br> 2. US 50 (Bass Lake Road to Cambridge Road) |
|  | Total: 0 segment | Total: 3 segments | Total: 2 segments |
| Local Roads | 1. Green Valley Road (west of Sophia Parkway) | 1. Cameron Park Drive (south of Hacienda Drive) <br> 2. Green Valley Road (west of Sophia Parkway) <br> 3. Green Valley Road (east of Francisco Drive) ${ }^{1}$ <br> 4. Latrobe Road (north of Golden Foothill Parkway) <br> 5. Missouri Flat Road (south of China Garden Road) ${ }^{2}$ <br> 6. White Rock Road (west of Windfield Way) <br> 7. White Rock Road (at El Dorado/Sacramento County Line) <br> 8. White Rock Road (east of Latrobe Road) ${ }^{2}$ | 1. Cameron Park Drive (south of Hacienda Drive) <br> 2. Green Valley Road (west of Sophia Parkway) <br> 3. Green Valley Road (east of Francisco Drive) ${ }^{1}$ <br> 4. Missouri Flat Road (south of China Garden Road) ${ }^{2}$ <br> 5. White Rock Road (east of Latrobe Road) ${ }^{2}$ |
|  | Total: 1 segment | Total: 8 segments | Total: 5 segments |
| Notes: <br> 1 This deficiency only applies to the two-lane portions of this segment <br> 2 The projected roadway segment forecast is within $3 \%$ of the capacity threshold for this segment |  |  |  |

## Interchange Deficiency Analysis Results

Based on the comparative analysis of the "old" vs. "new" travel model forecasts at each interchange ramp and over/under-crossing segment, the screening results re-confirm the following interchange deficiency assessments (based on previous operational studies) would continue to hold with the new model (based on a combination of comparing 2035 PM peak hour volumes and average annual growth rates).

- El Dorado Hills Boulevard Interchange
- Silva Valley Parkway Interchange (under construction)
- Cambridge Road Interchange
- Cameron Park Drive Interchange
- Ponderosa Road Interchange
- El Dorado Road Interchange

Volume comparisons for the Bass Lake Road interchange showed lower forecasted traffic volumes for all ramps and overcrossing using the new update travel model relative to past forecasts. Based on these lower traffic projections, a more detailed operational analysis was warranted to determine the future operational integrity of the Bass Lake Road interchange. The new operational analysis and findings based on the new model forecasts are provided in Attachment E. The 2035 future year operational results reconfirm the prior Bass Lake Road Interchange deficiencies. As such, the US 50 Bass Lake Road interchange will remain in the TIM Fee CIP.

Comparison results for the Missouri Flat Road interchange also show lower forecasted traffic volumes for all ramps and overcrossing (approximately $75 \%$ of the previous model volumes). A more detailed operational analysis was performed to confirm if the Missouri Flat Road interchange can accommodate future year traffic volumes resulting from the amended General Plan. The operational analysis and findings provided in Attachment E, confirm that the Missouri Flat Road interchange has sufficient capacity to accommodate 2035 future year conditions. Therefore the Missouri Flat Road interchange will not be included in the TIM Fee program at this time.

The County has recently commissioned a study of the area called the Missouri Flat Area Master Circulation \& Financing Plan Phase II (MC\&FP Phase II). The study will identify future land use options and infrastructure needs beyond what is currently assumed in the 2035 Amended General Plan scenario. Given that the MC\&FP Phase II study will not be completed prior to the completion of this analysis, the "growth potential" assessment in the vicinity of this interchange will not be fully reflected in this analysis. Based on MC\&FP Phase II study, further analysis will be performed to determine if and when additional improvements will be required at the Missouri Flat Road interchange.

Although the screening analysis determined that the Cameron Park Drive Interchange would be deficient by 2035, a more detailed operational analysis was performed to confirm whether the interchange is currently deficient. The analysis determined that there are no existing LOS deficiencies at the Cameron Park Drive interchange. The new baseline operational analysis and findings based on the new traffic count data are provided in Attachment E .

All other interchanges with the exception of the Red Hawk Parkway do not show sufficieint growth in volumes to trigger a deficiency. Since Red Hawk Parkway provided an access to and from Red Hawk Casino only and is being funded and operated by the Casino, it was excluded from deficiency analysis.

A summary of interchange volumes and annual growth rate comparisons between the previous and the current travel models are shown in Attachment D (Table D-1 and Table D-2). Table D-1 represents a volume comparison and Table D-2 presents a growth comparison for the Amended General Plan scenarios. Operational analyses for the Bass Lake Road, Missouri Flat Road and Cameron Park interchanges are provided in Attachment $E$.

## RECOMMENDED TIM FEE CIP IMPROVEMENTS

Based on identified deficiencies, TIM Fee CIP improvements are proposed for the following facility types:

- Mainline Freeway Improvements
- Interchange Improvements
- Local Roadway Improvements
- Parallel Facility Improvements


## Freeway Mainline Improvements

US 50 between Sacramento/El Dorado County Line and Cambridge Road is projected to operate at Levels of Service (LOS) exceeding the standards under the 2035 Amended General Plan Conditions. In addition, interchange deficiencies described in the following section also entail adding auxiliary lanes as part of the interchange improvements. Based on these mainline and interchange deficiencies, the following auxiliary lane TIM Fee CIP improvements are needed in order for the specified US 50 segments to maintain acceptable LOS operations.

- Eastbound County Line to Latrobe Road
- Eastbound Bass Lake Road to Cambridge Road
- Eastbound Cambridge Road to Cameron Park Drive
- Eastbound Cameron Park Drive to Ponderosa Road
- Westbound Ponderosa Road to Cameron Park Drive
- Westbound Cambridge Road to Bass Lake Road
- Westbound Bass Lake Road to Silva Valley Parkway
- Westbound EI Dorado Hills Boulevard to County Line


## Interchange Improvements

Based on the reconfirmation of the previously identified interchange deficiencies (i.e., comparative analysis of the "old" vs. "new" travel model forecasts at each interchange ramp and over/undercrossing segments), the following improvements are recommended at the following interchanges:

- El Dorado Hills Boulevard Interchange reconfiguration; existing structure to remain
- Silva Valley Parkway Interchange (Phase I under construction, Phase II only)
- Bass Lake Road Interchange; existing undercrossing structure to remain
- Cambridge Road Interchange modification; existing structure to remain
- Cameron Park Drive Interchange reconfiguration; new overcrossing structure
- Ponderosa Road Interchange reconfiguration; new overcrossing structure
- El Dorado Road Interchange reconfiguration; widen existing overcrossing


## Local Roadway Improvements

Based on identified deficiencies, the following local roadway improvements are recommended:

- Cameron Park Drive north of Palmer Drive to Hacienda Road; 2-Lane to 4-Lane; sidewalk on east side only
- Green Valley Road from Sacramento/El Dorado County line to Sophia Parkway; 2-Lane to 4Lane; sidewalk on both sides
- Green Valley Road east of Francisco Drive to east of Silva Valley Parkway; 2-Lane to 4-Lane; sidewalk on north side only ${ }^{6}$.
- White Rock Road from Post Street to Silva Valley Parkway 2-Lane to 4-Lane; sidewalk on both sides
- Missouri Flat Rd from China Garden Road to State Route 49; sidewalk on both sides


## Parallel Facility Improvements

Based on the identified US 50 mainline and local roadway deficiencies, the following parallel roadway capacity improvements are recommended:

- Saratoga Way (future) connect to Iron Point Road; 4-Lane; sidewalk on north side only; widen existing Saratoga Way 2-Lane to 4-Lane from west terminus to El Dorado Hills Boulevard; sidewalk on north side only
- Country Club Drive (future) connect El Dorado Hills Boulevard east to Silva Valley Parkway/Tong Road; sidewalk on both sides
- Country Club Drive (future) 2-Lane; Silva Valley Parkway/Tong Road to Bass Lake Road/Old Bass Lake Road; sidewalk on both sides.
- Country Club Drive (future) 2-Lane from Bass Lake Road/Old Bass Lake Road to Tierra de Dios Drive.
- Diamond Springs Parkway (future) from Missouri Flat Road to Route 49
- Latrobe Connection 2-Lane between White Rock Road and Golden Foothill Parkway/Latrobe Road
- Headington Road 2-Lane between El Dorado Road and Missouri Flat Road

The TIM Fee CIP projects are shown in Figure 2.

## Improvement Costs

The total cost of these improvements is as follows:

| US 50 Auxiliary Lanes: | $\$ 61,190,000$ |
| :--- | :--- |
| US 50 Interchanges | $\$ 172,861,500$ |
| Local Roadways | $\$ 96,944,000$ |

[^3]Sub Total: $\$ 330,995,500$.

Including outstanding reimbursement agreements and other program costs (discussed in the following sections), the projected total cost for the TIM Fee CIP is $\$ 416,156,874$.

Figure 2. TIM Fee CIP Locations


## CAPACITY THRESHOLD ANALYSIS

A Capacity Threshold Analysis was performed for each TIM Fee CIP improvement to determine the timeframe when facilities would exceed the County's LOS thresholds. The analysis was completed in two stages: without and with the parallel capacity projects. Based on this analysis, and available funding, the improvement projects will be designated to the 5-Year, 10-Year, and 20-Year CIP Project Lists.

To establish a continuous timeline of traffic growth, the analysis is based on linear interpolation between the baseline traffic counts and the 2035 Amended General Plan traffic projections. The latter assumes no infrastructure improvements unless built or under construction by January 1, 2015 (i.e., future year no build transportation network). Operational determinations were performed throughout the timeline to determine the interim year a given TIM Fee CIP facility exceeds the LOS standard. For interchange improvements and the associated auxiliary lanes, project timing was based on the freeway mainline deficiency. Interchanges located on non-deficient US 50 segments were defaulted to the 2035 timeframe. For roadways serving as parallel facilities to US 50, the need of the roadway improvements was identified based on the triggered year of the freeway segment.

Operational determinations were based on the same methodologies and LOS thresholds described previously. The HCM 2010 operational analysis methodology was used for analyzing US 50 (basic and merge-diverge) and the HCM 2010 planning method was used for analyzing local County roadways.

Table 7 presents the analysis results for US 50 segments and Table 8 presents the results for local County roadways. The volumes shown in these tables are for the baseline year and in five year increments (e.g. 2015, 2020, etc.). For each 5-year increment, when triggered, the reported volumes shown represent the actual year that the LOS standard was exceeded. For example, the triggered volume for Cameron Park Drive is 2018, which is representing the 20155 -year interval.

Table 7. Capacity Threshold Analysis for US 50 (without Parallel Capacity Projects)

| Segment | LOS Threshold | Direction | Peak | 2015 | 2020 | 2025 | 2030 | 2035 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sacramento/EI Dorado County Line - Latrobe Road | E | EB | AM | 2,470 | 2,880 | 3,290 | 3,700 | 4,110 |
|  |  |  | PM | 4,750 | 5,125 | 5,500 | 5,875 | 6,250 |
|  |  | WB | AM | 3,790 | 4,110 | 4,685 | 4,750 | 5,070 |
|  |  |  | PM | 1,880 | 2,160 | 2,445 | 2,725 | 3,010 |
| Latrobe Road - Bass Lake Road | D | EB | AM | 1,235 | 1,515 | 1,790 | 2,070 | 2,350 |
|  |  |  | PM | 3,400 | 3,820 | 4,240 | 4,660 | 5,080 |
|  |  | WB | AM | 3,695 | 4,145 | 4,600 | 5,050 | 5,500 |
|  |  |  | PM | 2,350 | 2,745 | 3,135 | 3,530 | 3,920 |
| Bass Lake Road - Cambridge Road | D | EB | AM | 1,380 | 1,605 | 1,830 | 2,055 | 2,280 |
|  |  |  | PM | 3,330 | 3,605 | 3,880 | 4,155 | 4,430 |
|  |  | WB | AM | 3,100 | 3,275 | 3,445 | 3,620 | 3,790 |
|  |  |  | PM | 2,095 | 2,405 | 2,715 | 3,020 | 3,330 |
| $\begin{array}{ll}\text { 1-Way Volume (vph) } & \text { LOS within threshold } \\ \text { 1-Wav Volume (vph) } & \text { LOS exceeds threshold }\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

Table 8. Capacity Threshold Analysis for Local Roadways (without Parallel Capacity Projects)

| Name | Location | LOS Threshold | Peak | 2015 | 2020 | 2025 | 2030 | 2035 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cameron Park Dr | South of Hacienda Dr | E | AM | 1,235 | 1,300 | 1,370 | 1,435 | 1,500 |
|  |  |  | PM | 1,655 | 1,680 | 1,740 | 1,800 | 1,860 |
| Green Valley Rd | West of Sophia Pkwy | E | AM | 1,985 | 2,140 | 2,395 | 2,655 | 2,910 |
|  |  |  | PM | 2,135 | 2,400 | 2,735 | 3,065 | 3,400 |
| Green Valley Rd | East of Francisco Dr | E | AM | 1,260 | 1,340 | 1,470 | 1,605 | 1,735 |
|  |  |  | PM | 1,105 | 1,230 | 1,395 | 1,555 | 1,715 |
| Latrobe Rd | North of Golden Foothill Pkwy | D | AM | 605 | 2,535 | 3,285 | 3,365 | 3,780 |
|  |  |  | PM | 710 | 2,675 | 3,220 | 3,450 | 3,840 |
| White Rock Rd | West of Windfield Way | E | AM | 2,125 | 980 | 1,130 | 1,285 | 1,440 |
|  |  |  | PM | 2,285 | 1,085 | 1,360 | 1,685 | 1,900 |
| White Rock Rd | At County Line | E | AM | 825 | 1,015 | 1,195 | 1,380 | 1,560 |
|  |  |  | PM | 815 | 1,325 | 1,690 | 1,930 | 2,230 |
| White Rock Rd | East of Latrobe Road | E | AM | 835 | 1,070 | 1,110 | 1,145 | 1,180 |
|  |  |  | PM | 1,025 | 1,495 | 1,545 | 1,600 | 1,650 |
| 2-Way Volume (vph) | LOS within theshold |  |  |  |  |  |  |  |
| 2-Way Volume (vph) | LOS exceeds threshold |  |  |  |  |  |  |  |

## Traffic Diversion Due to Parallel Capacity Projects

Based on the deficiency analysis, several new roadway segments that run parallel to US 50 or other roadways that are projected to be deficient by 2035 were identified. Construction of these parallel capacity projects would provide additional capacity along key segments, thereby extending the service life of the existing facility. The following roadway segments were identified as parallel facilities:

- Saratoga Way extension
- Country Club Drive extension
- Diamond Springs Parkway
- Latrobe Connection
- Headington Road extension

To test the effects of the parallel capacity projects, the segments were added to the 2035 Amended General Plan model (without any other roadway improvements). The travel demand model was run to determine the change in peak hour traffic volumes as a result of the parallel capacity projects. These traffic changes are shown in Table 9 and Table 10 for US 50 and local roadways, respectively. Most of the study roadways benefit from the parallel capacity projects, as shown by a decrease in projected peak hour traffic.

The capacity threshold analysis process (described above) was repeated, assuming the parallel capacity projects are constructed. For the interim years, traffic diversion was based on interpolation.

The same operational analysis methodologies were used to analyze the deficient facilities affected by the traffic diversion to identify the remaining deficient segments. The analysis results are shown in Table 11 and Table 12 for US 50 and local roadways, respectively.

Table 9. Traffic Diversion for US 50 Segments with Parallel Capacity Projects

| Segment | Direction | Peak | Volume Change (vph) |
| :---: | :---: | :---: | :---: |
| Sacramento/El Dorado County Line - Latrobe Road | EB | AM | -1,017 |
|  |  | PM | -1,122 |
|  | WB | AM | -1,154 |
|  |  | PM | -750 |
| Latrobe Road - Bass Lake Road | EB | AM | -44 |
|  |  | PM | -160 |
|  | WB | AM | -446 |
|  |  | PM | -49 |
| Bass Lake Road - Cambridge Road | EB | AM | +46 |
|  |  | PM | -29 |
|  | WB | AM | -25 |
|  |  | PM | +2 |

Table 10. Traffic Diversion for Local Roadways with Parallel Capacity Projects

| Name | Location | Peak | Volume Change <br> (vph) |
| :--- | :--- | :---: | :---: |
|  | South of Hacienda Drive | AM | +4 |
|  |  | PM | -8 |
| Green Valley Road | West of Sophia Parkway | AM | -38 |
|  |  | PM | -142 |
| Green Valley Road | East of Francisco Drive | AM | -67 |
|  |  | PM | -72 |
| Latrobe Road | North of Golden Foothill Parkway | AM | -988 |
|  | White Rock Road | West of Windfield Way | PM |
|  | White Rock Road | AT County Line | PM |
| White Rock Road |  | AM | -552 |
|  |  | East of Latrobe Road | AM |
|  |  | PM | -582 |

Table 11. Capacity Threshold Analysis for US 50 with Parallel Capacity Projects

| Segment | LOS Threshold | Direction | Peak | 2015 | 2020 | 2025 | 2030 | 2035 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sacramento/EI Dorado County Line - Latrobe Road | E | EB | AM | 1,860 | 2,165 | 2,475 | 2,785 | 3,093 |
|  |  |  | PM | 3,895 | 4,205 | 4,515 | 4,820 | 5,128 |
|  |  | WB | AM | 2,925 | 3,175 | 3,420 | 3,670 | 3,916 |
|  |  |  | PM | 1,410 | 1,620 | 1,835 | 2,045 | 2,260 |
| Latrobe Road - Bass Lake Road | D | EB | AM | 1,210 | 1,485 | 1,755 | 2,030 | 2,306 |
|  |  |  | PM | 3,295 | 3,700 | 4,105 | 4,515 | 4,920 |
|  |  | WB | AM | 3,395 | 3,810 | 4,560 | 4,640 | 5,054 |
|  |  |  | PM | 2,320 | 2,710 | 3,095 | 3,485 | 3,871 |
| Bass Lake Road - Cambridge Road | D | EB | AM | 1,405 | 1,635 | 1,865 | 2,095 | 2,326 |
|  |  |  | PM | 3,310 | 3,580 | 3,855 | 4,130 | 4,401 |
|  |  | WB | AM | 3,080 | 3,255 | 3,420 | 3,595 | 3,765 |
|  |  |  | PM | 2,095 | 2,405 | 2,715 | 3,020 | 3,332 |
| 1-Way Volume (vph) LOS within threshold <br> 1-Wav Volume (vph) LOS exceeds threshold | LOS within threshold LOS exceeds threshold |  |  |  |  |  |  |  |

Table 12. Capacity Threshold Analysis for Local Roadways with Parallel Capacity Projects

| Name | Location | LOS Threshold | Peak | 2015 | 2020 | 2025 | 2030 | 2035 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cameron Park Dr | South of Hacienda Dr | E | AM | 1,240 | 1,305 | 1,375 | 1,440 | 1,504 |
|  |  |  | PM | 1,650 | 1,675 | 1,735 | 1,795 | 1,852 |
| Green Valley Rd | West of Sophia Pkwy | E | AM | 2,010 | 2,110 | 2,365 | 2,620 | 2,872 |
|  |  |  | PM | 2,110 | 2,300 | 2,620 | 2,935 | 3,258 |
| Green Valley Rd | East of Francisco Dr | E | AM | 1,235 | 1,290 | 1,415 | 1,545 | 1,668 |
|  |  |  | PM | 1,090 | 1,180 | 1,335 | 1,490 | 1,643 |
| Latrobe Rd | North of Golden Foothill Pkwy | D | AM | 1,570 | 1,875 | 2,180 | 2,485 | 2,792 |
|  |  |  | PM | 1,780 | 2,080 | 2,385 | 2,685 | 2,988 |
| White Rock Rd | West of Windfield Way | E | AM | 495 | 590 | 680 | 775 | 868 |
|  |  |  | PM | 480 | 640 | 800 | 960 | 1,118 |
| White Rock Rd | At County Line | E | AM | 545 | 660 | 780 | 900 | 1,018 |
|  |  |  | PM | 675 | 870 | 1,075 | 1,270 | 1,468 |
| White Rock Rd | East of Latrobe Road | E | AM | 1,000 | 1,030 | 1,070 | 1,105 | 1,138 |
|  |  |  | PM | 1,445 | 1,495 | 1,545 | 1,600 | 1,649 |
| 2-Way Volume (vph) | LOS within theshold |  |  |  |  |  |  |  |
| 2-Way Volume (vph) | LOS exceeds threshold |  |  |  |  |  |  |  |

## Findings

Based on the parallel capacity assessment, there are two segments of US 50 and three local roadway segments that would remain deficient as shown in Table 11 and Table 12. These are as follows:

US 50

1. Westbound from Bass Lake Road to Silva Valley Parkway (AM Peak)
2. Eastbound from Bass Lake Road to Cambridge Road (PM Peak)

## Local Roadways

1. Cameron Park Drive: South of Hacienda Drive
2. Green Valley Road: West of Sophia Parkway
3. Green Valley Road: East of Francisco Drive

The need for auxiliary lanes is also tied to the deficient interchanges. Assuming the parallel capacity projects are in-place, Table $\mathbf{1 3}$ provides the priority list for the improvement projects by 5-year time increment.

Table 13. Improvement Projects Priority List

| Improvements | 2015 | 2020 | 2025 | 2030 | 2035 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Freeway Mainline Auxiliary Lane |  |  |  |  |  |
| A-1 Eastbound County Line to El Dorado Hills Blvd |  |  |  |  | Y |
| A-2 Eastbound Bass Lake Rd to Cambridge Rd |  |  |  |  | Y |
| A-3 Eastbound Cambridge Rd to Cameron Park Dr |  |  |  |  | Y |
| A-4 Eastbound Cameron Park Dr to Ponderosa Rd |  |  |  |  | Y |
| A-5 Westbound Ponderosa Rd to Cameron Park Dr |  |  |  |  | Y |
| A-6 Westbound Cambridge Rd to Bass Lake Rd |  |  |  |  | Y |
| A-7 Westbound Bass Lake Rd to Silva Valley Pkwy |  |  | Y |  |  |
| A-5 Westbound El Dorado Hills Blvd to County Line |  |  |  |  | Y |
| Interchange Improvements |  |  |  |  |  |
| I-1 El Dorado Hills Blvd ${ }^{1}$ |  |  |  | Y |  |
| I-2 Silva Valley Pkwy Phase 2 |  |  |  |  | Y |
| I-3 Bass Lake Rd |  |  | Y |  |  |
| I-4 Cambridge Rd |  |  |  |  | Y |
| I-5 Cameron Park Dr ${ }^{2}$ |  |  |  |  | Y |
| I-6 Ponderosa Rd |  |  |  |  | Y |
| I-7 El Dorado Rd |  |  |  |  | Y |
| Roadway Improvements |  |  |  |  |  |
| R-1 Cameron Park Dr: North of Palmer to Hacienda Rd | Y |  |  |  |  |
| R-2 Green Valley Rd: County Line to Sophia Pkwy | Y |  |  |  |  |
| R-3 Green Valley Rd: East of Francisco Dr to East of Silva Valley Pkwy |  |  |  |  | Y |


| Improvements | 2015 | 2020 | 2025 | 2030 |
| :--- | :--- | :--- | :--- | :---: |
| R-4 White Rock Rd: Post St to South of Silva Valley Pkwy ${ }^{3}$ | 2035 |  |  |  |
| R-5 Missouri Flat Rd: China Garden Rd to SR 49 |  |  |  |  |

1. Timeframe based on El Dorado Hills Boulevard Interchange and US-50 HOV Lane Traffic Study (May, 2009)
2. Timeframe based on lack of consensus for a preferred Interchange configuration. Funding to develop an update to the 2008 PSR is applicable to the 2015-2020 timeframe with impending authorization by the County.
3. Inclusion and timeframe based on the forecasts being within $3 \%$ of the capacity volume threshold by 2035.
4. Timeframe based on need to procure ROW.

## AB1600 NEXUS: TRIP ALLOCATION

To compute the percentage of trip ends applicable to the County's TIM Fee, new daily trip ends that either originate or end within the unincorporated of the County must be accounted for. To determine this as "cleanly" as possible, the exterior boundaries of the County's eight TIM Fee Zone boundaries were first modified ("smoothed") to conform to the applicable El Dorado County travel demand model TAZ boundaries (Figure 3).

For each deficient roadway segment to be improved, the model identified total growth in daily trips from 2015-2035 and total growth in daily trips from unincorporated areas for the same time period. The CUBE software select link script automatically computes total new unincorporated trips by TIM Fee Zone through application of a TAZ correspondence table. The link volume delta (or difference) between these model runs represents "new" trips generated by future growth. Of the unincorporated share of growth in daily trips, the traffic model was used to determine the percentage of external, incorporated, or unincorporated travel of daily trips originating or destined to a given TIM Fee Zone.

To differentiate daily trips on deficient roadways as being regional or local, a model select link analysis was performed to determine the share of new daily trips from each of the eight TIM Fee Zones that traverse a given deficient roadway. The determination of interregional trips was based on excluding one-half of daily trips whose origin or destination are from incorporated areas or areas outside El Dorado County (I-X or X-I trips) and excluding all trips which do not have an origin or destination within the county ( $\mathrm{X}-\mathrm{X}$ ). Conversely, all daily trips ( $100 \%$ ) that have both origin and destination within the unincorporated area (I-I) of the County and half trips (50\%) with either an origin or a destination in the unincorporated County were accounted for. This establishes a reasonable relationship between the TIM fees collected and the impacts expected from development occurring specifically within the unincorporated areas of El Dorado County.

For interchanges, model select link results were summed for each ramp (on- and off-ramps) and the interchange service street over- or under-crossing. For auxiliary lanes, fair share percentages were based on both the eastbound and westbound couplet combined.

The resulting percentages for each TIM Fee roadway improvement, which reflect the fair share of the improvement costs to new development by TIM Fee Zone, is shown in Table 14. This link-based fair share approach supports the TIM Fee nexus requirements. These percentages are graphically presented in Attachment F for each TIM Fee roadway improvement. The City of Placerville is excluded from this analysis given that the City of Placerville's share of costs is excluded from the fee calculation.

For the seven TIM Fee CIP projects with outstanding reimbursement agreement commitments carried over from the existing program, the original 2004 El Dorado County Travel Demand Model trip allocation results were carried forward, except Silva Valley Pkwy Interchange and Latrobe Connection use updated 2015 model data.

Figure 3. TIM Fee Geography: Eight Zone "Smoothed"


Table 14. TIM Fee CIP Fair Share Analysis Results

| TIM Fee Capital Improvement Project |  |  |  | County Allocation |  | Smoothed 8 Zone Geography Scenario Allocation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIM Fee Map ID | CIP Segment | From | To | Local | External | $\begin{gathered} \text { Zone } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 2 \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 6 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 7 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 8 \\ \hline \end{gathered}$ |
|  | US 50 Auxiliary Lanes |  |  |  |  |  |  |  |  |  |  |  |  |
| A-1 | EB US 50 Auxiliary Lane | County Line | El Dorado Hills Boulevard Interchange | 50.00\% | 50.00\% | 0.08\% | 35.28\% | 7.82\% | 0.00\% | 0.43\% | 0.50\% | 0.00\% | 55.89\% |
| A-2 | EB US 50 Auxiliary Lane | Bass Lake Road Interchange | Cambridge Road Interchnage | 74.87\% | 25.13\% | 0.16\% | 68.55\% | 13.60\% | 1.60\% | 1.17\% | 0.97\% | 0.04\% | 13.91\% |
| A-3 | EB US 50 Auxiliary Lane | Cambridge Road Interchnage | Cameron Park Drive Interchange | 65.89\% | 34.11\% | 0.72\% | 37.40\% | 30.67\% | 4.69\% | 3.96\% | 3.00\% | 0.41\% | 19.16\% |
| A-4 | EB US 50 Auxiliary Lane | Cameron Park Drive Interchange | Ponderosa Road Interchange | 67.89\% | 32.11\% | 0.64\% | 45.83\% | 27.44\% | 4.20\% | 3.54\% | 2.69\% | 0.35\% | 15.31\% |
| A-5 | WB US 50 Auxiliary Lane | Ponderosa Road Interchange | Cambridge Road Interchnage | 67.89\% | 32.11\% | 0.64\% | 45.83\% | 27.44\% | 4.20\% | 3.54\% | 2.69\% | 0.35\% | 15.31\% |
| A-6 | WB US 50 Auxiliary Lane | Cambridge Road Interchnage | Bass Lake Road Interchange | 74.87\% | 25.13\% | 0.16\% | 68.55\% | 13.60\% | 1.60\% | 1.17\% | 0.97\% | 0.04\% | 13.91\% |
| A-7 | WB US 50 Auxiliary Lane | Bass Lake Road Interchange | Silva Valley Parkway Interchange | 76.80\% | 23.20\% | 0.15\% | 54.57\% | 12.13\% | 1.38\% | 0.98\% | 0.86\% | 0.04\% | 29.89\% |
| A-8 | WB US 50 Auxiliary Lane | El Dorado Hills Boulevard Interchange | County Line | 50.00\% | 50.00\% | 0.08\% | 35.28\% | 7.82\% | 0.00\% | 0.43\% | 0.50\% | 0.00\% | 55.89\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Interchange Projects |  |  |  |  |  |  |  |  |  |  |  |  |
| I-1 | El Dorado Hills Boulevard Interchange |  |  | 92.23\% | 7.77\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.54\% | 99.46\% |
| I-2 | Silva Valley Parkway Interchange |  |  | 83.36\% | 16.64\% | 0.28\% | 25.30\% | 5.22\% | 1.85\% | 1.43\% | 0.78\% | 0.72\% | 64.42\% |
| I-3 | Bass Lake Road Interchange |  |  | 84.34\% | 15.66\% | 0.03\% | 18.02\% | 3.05\% | 0.34\% | 0.46\% | 0.23\% | 0.32\% | 77.55\% |
| I-4 | Cambridge Road Interchange |  |  | 77.94\% | 22.06\% | 0.06\% | 71.65\% | 1.62\% | 0.69\% | 0.42\% | 0.25\% | 0.40\% | 24.91\% |
| I-5 | Cameron Park Drive Interchange |  |  | 87.37\% | 12.63\% | 0.23\% | 79.95\% | 3.54\% | 0.98\% | 0.92\% | 0.64\% | 0.36\% | 13.39\% |
| 1-6 | Ponderosa Road Interchange |  |  | 87.25\% | 12.75\% | 0.20\% | 74.12\% | 5.91\% | 5.35\% | 1.08\% | 0.41\% | 0.09\% | 12.83\% |
| I-7 | El Dorado Road Interchange |  |  | 83.70\% | 16.30\% | 0.32\% | 9.95\% | 77.40\% | 2.59\% | 3.02\% | 0.92\% | 1.73\% | 4.07\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Roadway Improvements |  |  |  |  |  |  |  |  |  |  |  |  |
| R-1 | Cameron Park Drive | Palmer Drive | Hacienda Road | 93.43\% | 6.57\% | 0.08\% | 92.69\% | 0.89\% | 0.09\% | 0.40\% | 0.43\% | 0.31\% | 5.12\% |
| R-2 ${ }^{1}$ | Green Valley Road | County Line | Sophia Parkway | 14.00\% | n/a | 0.05\% | 25.80\% | 0.43\% | 12.40\% | 0.07\% | 0.04\% | 0.22\% | 60.98\% |
| R-3 | Green Valley Road | Francisco Drive | Silva Valley Parkway | 51.33\% | 48.67\% | 0.01\% | 48.70\% | 0.00\% | 23.67\% | 0.00\% | 0.00\% | 0.00\% | 27.62\% |
| R-4 | White Rock Road | Post Street | Silva Valley Parkway | 95.36\% | 4.64\% | 0.71\% | 43.06\% | 10.25\% | 3.43\% | 3.23\% | 1.78\% | 1.63\% | 35.91\% |
| R-5 | Missouri Flat Road | China Garden Road | SR 49 | 100.00\% | 0.00\% | 0.09\% | 11.79\% | 73.84\% | 1.66\% | 0.80\% | 0.98\% | 0.12\% | 10.72\% |
| R-6 | Saratoga Way | Iron Point Road | El Dorado Hills Blvd | 49.82\% | 50.18\% | 0.17\% | 3.15\% | 0.00\% | 2.34\% | 0.18\% | 0.18\% | 0.00\% | 93.99\% |
| R-7 | Country Club Drive | El Dorado Boulevard | Silva Valley Parkway | 96.66\% | 3.34\% | 0.44\% | 35.51\% | 7.77\% | 2.46\% | 2.01\% | 1.11\% | 0.71\% | 50.00\% |
| R-8 | Country Club Drive | Silva Valley Pkwy | Tong Road | 70.42\% | 29.58\% | 0.04\% | 0.73\% | 0.07\% | 0.58\% | 0.03\% | 0.01\% | 0.56\% | 97.98\% |
| R-9 | Country Club Drive | Tong Road | Bass Lake Road | 84.37\% | 15.63\% | 0.24\% | 0.12\% | 0.00\% | 0.45\% | 0.00\% | 0.20\% | 0.49\% | 98.50\% |
| R-10 | Country Club Drive | Bass Lake Road | Tierre de Dios Drive | 83.74\% | 16.26\% | 0.32\% | 44.63\% | 2.82\% | 0.46\% | 1.22\% | 0.72\% | 0.51\% | 49.32\% |
| R-11 | Diamond Springs Parkway | Missouri Flat Road | Route 49 | 82.29\% | 17.71\% | 0.82\% | 10.44\% | 68.06\% | 1.43\% | 2.24\% | 9.65\% | 1.77\% | 5.59\% |
| R-12 | Latrobe Connection | White Rock Road | Golden Foothill Parkway | 42.67\% | 57.33\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.77\% | 97.23\% |
| R-13 | Headington Road | El Dorado Road | Missouri Flat Road | 99.83\% | 0.17\% | 0.38\% | 1.01\% | 92.71\% | 0.00\% | 0.00\% | 4.59\% | 1.32\% | 0.00\% |


| TIM Fee Capital Improvement Project |  |  |  | County Allocation |  | Smoothed 8 Zone Geography Scenario Allocation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIM Fee Map ID | CIP Segment | From | To | Local | External | $\begin{gathered} \text { Zone } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 2 \end{gathered}$ | $\begin{gathered} \text { Zone } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 6 \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 7 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Zone } \\ 8 \\ \hline \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Reimbursement Agreements |  |  |  |  |  |  |  |  |  |  |  |  |
| NA | Bass Lake Road |  |  | 100.00\% | 0.00\% | 0.10\% | 28.87\% | 4.01\% | 0.73\% | 0.36\% | 0.11\% | 0.59\% | 65.23\% |
| NA | Green Valley Road |  |  | 100.00\% | 0.00\% | 0.01\% | 33.43\% | 0.28\% | 7.91\% | 0.02\% | 0.01\% | 0.01\% | 58.33\% |
| NA | Latrobe Road |  |  | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.77\% | 97.23\% |
| NA | Madera Way |  |  | 100.00\% | 0.00\% | 0.07\% | 35.15\% | 1.36\% | 3.45\% | 0.37\% | 0.07\% | 0.06\% | 59.47\% |
| NA | Silva Valley Parkway |  |  | 100.00\% | 0.00\% | 0.28\% | 25.30\% | 5.22\% | 1.85\% | 1.43\% | 0.78\% | 0.72\% | 64.42\% |
| NA | Silver Springs Parkway |  |  | 100.00\% | 0.00\% | 0.07\% | 35.15\% | 1.36\% | 3.45\% | 0.37\% | 0.07\% | 0.06\% | 59.47\% |
| NA | Silver Springs Parkway |  |  | 100.00\% | 0.00\% | 0.07\% | 35.15\% | 1.36\% | 3.45\% | 0.37\% | 0.07\% | 0.06\% | 59.47\% |

## 1 Exist Deficiency: Internal Fair Share based on \% of trins from new growth relative to total

trip
Source: Kittelson \& Associates, Inc.

## AB1600 NEXUS: OTHER PROGRAMS

The TIM Fee program also includes several line item project categories ${ }^{7}$. These include:

- Bridge Replacements
- Intersection Improvements
- Transit Capital Improvements
- Program Administration.

The AB1600 nexus assessment for each of these programs is provided below.

## Bridges Replacement

There are nine bridge replacement projects included as part of the TIM Fee CIP. The need for these improvements is attributable to traffic generated by both existing and future development. As such, only the fraction of new development's share of trip growth from 2015 to 2035 (expressed in equivalent dwelling units or EDU) is applicable for use of TIM fees. Total EDU growth for El Dorado County is $20 \%$ (Table 5, Draft Nexus \& Funding Model, March, 2016). Given that the $11.47 \%$ local match requirement for federal Highway Bridge Replacement (HBR) grants is less than maximum allowable share of TIM Fees (20\%), use of TIM fees to satisfy the local match requirement for these nine bridge replacement improvement projects meets the nexus requirement.

The bridge improvements, total costs, and the TIM Fee share of the costs are provided in Table 15.
Table 15. Bridge Replacement TIM Fee Grant Matching Funds

| Bridge Improvement |  | Estimated Cost |  | \% not covered by HBR | Match needed for HBR |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 77127 Green Valley Road at Indian Creek - Bridge Replacement | \$ | 4,501,600.00 | 11.47\% | \$ | 516,333.52 |
| 2 | 77136 Green Valley Road at Mound Springs Creek - Bridge Replacement | \$ | 4,504,008.00 | 11.47\% | \$ | 516,609.72 |
| 3 | 77114 Green Valley Road at Weber Creek - Bridge Replacement | \$ | 11,122,714.00 | 11.47\% | \$ | 1,275,775.30 |
| 4 | XXXXX Salmon Falls Road at South Fork American River - Bridge Replacement | \$ | 10,500,000.00 | 11.47\% | \$ | 1,204,350.00 |
| 5 | 77115 Sly Park Road at Clear Creek Crossing - Bridge Replacement | \$ | 5,748,951.00 | 11.47\% | \$ | 659,404.68 |
| 6 | GPXXX Forni Road at Weber Creek | \$ | 4,500,000.00 | 11.47\% | \$ | 516,150.00 |
| 7 | GPXXX White Rock Road at Carson Creek | \$ | 4,500,000.00 | 11.47\% | \$ | 516,150.00 |
| 8 | GPXXX Mt. Aukum Rd. at North Fork Cosumnes River | \$ | 4,500,000.00 | 11.47\% | \$ | 516,150.00 |
| 9 | 77116 Bucks Bar Rd. at North Fork Cosumnes River | \$ | 7,806,242.00 | 11.47\% | \$ | 895,375.96 |
|  | TOTAL |  |  |  | \$ | 6,616,299.17 |

[^4]
## Traffic Signals \& Operational Improvements

The El Dorado County Community Development Agency (CDA) has developed an intersection needs prioritization process as part of its annual update of the Capital Improvement Program (CIP). The intersection needs prioritization process is consistent with Goal TC-X and Measure Y which entails coordinating planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads. This program is integrated with the TIM Fee CIP process to provide a finer level of resolution for identifying TIM Fee eligible intersection improvement needs.

The El Dorado County Transportation Division created a universal "superset" list of non-signalized intersections that may need signalization in the future. This superset list of intersections is evaluated each year to group applicable intersections in the following two tier groups:

- Tier 1: Intersections that meet all three planning level traffic signal volume warrants or address a potential operational issue that can be mitigated by minor intersection improvements.
- Tier 2: Locations that meet one or two planning level volume warrants now and may meet all three in the future. Monitor for movement to Tier 1.

The Tier 1 category addresses existing deficiencies. The need for these improvements is attributable to traffic generated by both existing and future development. Conversely, the Tier 2 category addresses potential signalization needs resulting from future development. Tier 2 improvement costs are eligible for a $100 \%$ TIM Fee cost allocation. At this time, there are three intersections identified in the County's Tier 1 list and 19 intersections listed in the Tier 2 list (Table 16).

Table 16. El Dorado County Intersection Needs Prioritization List

| Tier <br> Ranking | Road 1 |  |  |
| :---: | :--- | :--- | :---: |
| 1 | Bass Lake Rd | Eountry Club Dr |  |
| 1 | Lotus Rd-Green Valley Rd | Green Valley Rd | Stop on WB Country Club Dr |
| 1 | Missouri Flat Rd | China Garden Rd | Stop on WB Green Valley Rd |
| 2 | Cambridge Rd | Knollwood Dr (S) | Stop on WB China Garden Rd |
| 2 | EDH BI | Francisco Dr | Stop on EB Knollwood Dr |
| 2 | Missouri Flat Rd | Enterprise Dr | All-Way Stop |
| 2 | Missouri Flat Rd | Headington Rd | Stop on EB Enterprise Dr |
| 2 | Pony Express Tr | Sly Park Rd | Stop on WB Headington Rd |
| 2 | Silva Valley Pw | Golden Eagle Ln | All-Way Stop |
| 2 | Silva Valley Pw | Appian Way/Charter Way | All-Way Stop |
| 2 | SR49 | SR193 (Cool) | All-Way Stop |
| 2 | SR49 | Pleasant Valley Rd (El Dorado) | All-Way Stop |
| 2 | Green Valley Rd | Loch Wy | All-Way Stop |
| 2 | Pleasant Valley Rd | Big Cut Rd | Stop on NB Loch Wy |
| 2 | Pleasant Valley Rd | Cedar Ravine Rd | Stop on SB Cedar Ravine Rd |
| 2 | Pleasant Valley Rd | Bucks Bar Rd | All-Way Stop |
| 2 | Salmon Falls Rd | Lakehills Dr | Stop on EB Lake Hills Rd |
| 2 | Pleasant Valley Rd | Newtown Rd | Stop on SB Newtown Rd |
| 2 | Pony Express Tr | Forebay Rd | Stop on SB Forebay Rd |
| 2 | Salmon Falls Rd | Malcom Dixon Rd | Stop on WB Malcom Dixon Rd |
| 2 | Salmon Falls Rd | Village Center Dr | Stop on EB Village Center Dr |
| 2 | Green Valley Road | Cameron Park Dr | Signal |

The cost per intersection improvement includes installation of traffic signals and channelization requirements including left/right turn pockets and receiving lanes and Inteligent Transportation System (ITS) treatments as applicable. Based on historical cost data since 2001 shown in Table 17, the average cost for intersection improvements in El Dorado County is approximately $\$ 1.8$ million per intersection. The average cost includes the singal installation and any roadway widening needed for turn lanes at the intersection. The maximum allowable TIM Fee allocation for Tier 1 intersection improvements would therefore be $\$ 360,000$ ( $20 \%$ EDU growth of $\$ 1.8$ million) and $\$ 1.8$ million for Tier 2 intersection improvements (i.e., $100 \%$ TIM fee cost allocation).

Table 17. El Dorado County Historical Intersection Improvement Costs

| PROJECT <br> NUMBER | PROJECT DESCRIPTION | EL DORADO COUNTY SUPERVISORIAL DISTRICT | TOTAL PROJECT COST |  |
| :---: | :---: | :---: | :---: | :---: |
| 73312 | Green Valley Road/Silva Valley Parkway Intersection Signalization | 1 | \$ | 2,636,859.52 |
| 73349 | Mormon Island Drive Realignment and Signalization | 1 | \$ | 2,000,000.00 |
| 76107/76114 | Silver Springs Parkway/Green Valley Road Intersection, Green Valley Road/Deer Valley Road Intersection | 1 | \$ | 5,727,836.68 |
| 71350 | U.S. 50 - Latrobe Road E/B Off Ramp | 1 | \$ | 334,427.46 |
| 72366 | Cameron Park Drive/La Canada Intersection Signalization | 2\&4 | \$ | 2,293,052.44 |
| 72365 | Cameron Park Drive/Oxford Way Intersection Widening and Signalization | 2\&4 | \$ | 1,866,635.57 |
| 73321 | Cameron Park Drive/Coach Lane Intersection Improvements | 2 | \$ | 672,945.65 |
| 73345 | Cambridge Road/Merrychase Drive Intersection Signalization | 2 | \$ | 1,335,961.93 |
| 73127 | Cameron Park Drive/Meder Road Intersection Signalization | 2\&4 | \$ | 1,166,537.51 |
| 73124 | Cameron Park Drive/Mira Loma Drive Intersection Improvements | 2\&4 | \$ | 1,068,113.97 |
| 53108 | U.S.50/Ponderosa Road Interchange Signalization | 2\&4 | \$ | 1,468,989.18 |
| 73320 | Pleasant Valley Road (S.R. 49)/Patterson Drive Intersection Signalization | 3 | \$ | 4,304,776.20 |
| 73354 | Durock Road/Business Drive Intersection Signalization | 3 | \$ | 2,560,402.21 |
| 73356 | Missouri Flat Road/Golden Center Drive Intersection Signalization | 3 | \$ | 389,902.90 |
| 73125 | Missouri Flat Road/El Dorado Road Intersection Signalization | 3\&4 | \$ | 1,196,514.18 |
| 73346 | S.R. 49/Fowler Drive Intersection | 3 | \$ | 331,978.65 |
|  |  | Total <br> Ave. cost | \$ | $\begin{array}{r} 29,354,934.05 \\ 1,834,683.38 \\ \hline \end{array}$ |

Applying the cost per intersection estimates to the Tier 1 and Tier 2 lists results in a total TIM Fee cost allocation for the County's Intersection Needs Prioritization Process of $\$ 35,280,000$ (Table 18). Since 2001, the historical rate of construction for improvements identified through the County's Intersection Needs Prioritization Program has been approximately one improvement per year.

Table 18. TIM Fee Cost - Intersection Needs Prioritization Process

| Location Description | \# of <br> Intersections | TIM Fee Cost <br> per <br> Intersection | TIM Fee Cost |
| :--- | :---: | :---: | :---: |
| Tier 1 Intersections | 3 | $\$ 360,000$ | $\$ 1,080,000$ |
| Tier 2 Intersections | 19 | $\$ 1,800,000$ | $\$ 34,200,000$ |
| Total | 22 |  | $\$ 35,280,000$ |

## Transit Capital

The TIM Fee program funds transit capital improvements needed to accommodate new development. From a nexus perspective, this can be supported in several ways. One is to allocate $100 \%$ of the transit capital costs associated with transit expansion projects (assumes these purchases are designed to accommodate future development) and new development's share of trip growth from 2015 to 2035 expressed in equivalent dwelling units (equates to 20\%) to transit capital improvement costs not directly associated with new development. Based on this approach, $1.37 \%$ of the total TIM Fee Capital Improvement Program costs would be allocated to transit capital improvements (Table 19, $\$ 5,701,000$ total transit capital cost share $/ \$ 415,192,855$ total TIM Fee CIP cost). This percentage is supported by the most recent American Community Survey data for the unincorporated El Dorado County which indicates that the transit share of journey to work trips in unincorporated El Dorado County is 1.2\% (see Table 20).

Table 19. TIM Fee Transit Capital Projects

|  | Amount | Unit Cost | Total Cost | New Development Share ${ }^{1}$ | TIM Fee Program Share |
| :---: | :---: | :---: | :---: | :---: | :---: |
| County Line Transit Center ${ }^{2}$ |  |  |  |  |  |
| Land |  |  | \$ 3,500,000 |  |  |
| Construction |  |  | 5,400,000 |  |  |
| Total |  |  | \$ 8,900,000 | 20\% | \$ 1,780,000 |
| Cameron Park Park-and Ride ${ }^{2}$ |  |  | \$ 2,350,000 | 20\% | 470,000 |
| Missouri Flat Transfer Point Expansion ${ }^{3}$ |  |  | \$ 270,000 | 100\% | 270,000 |
| Vehicles Required for Service Expansion ${ }^{3}$ Dial-A-Ride Vans |  | \$ 42,000 | \$ 420,000 |  |  |
| Local Route Buses | 7 | 323,000 | 2,261,000 |  |  |
| Commuter Bus | 1 | 500,000 | . 500,000 |  |  |
| Total |  |  | \$ 3,181,000 | 100\% | 3,181,000 |
| Total |  |  | \$ 14,701,000 |  | \$ 5,701,000 |

${ }^{1}$ For capital projects that benefit existing and new develpment, TIM Fee Program share is based only on EDUs from new development in 2035 as a percent of total EDUs in 2035.
${ }^{2}$ Costs based on Park-and-Ride Master Plan (2007). Facilities serve existing and new development so share assigned to TIM Fee Program based on new EDUs as a percent of total EDUs in 2035.
${ }^{3}$ Costs based on Western El Dorado County Short- and Long-Range Transit Plan (2014). Transfer point and vehicle fleet are expansion projects to serve new development so costs allocated 100 percent to TIM Fee Program.

Sources: El Dorado County Transit Authority; Table 5.

Table 20. El Dorado County Journey to Work Mode Share

| Alternative Mode | Unincorporated Areas <br> El Dorado County \% <br> Mode Share |
| :--- | :---: |
| Drive Alone | $77.7 \%$ |
| Carpool | $9.5 \%$ |
| Public Transit | $\mathbf{1 . 2 \%}$ |
| Bicycle | $0.3 \%$ |
| Walked | $1.3 \%$ |
| Work at Home | $8.1 \%$ |
| Other | $1.3 \%$ |

Source: 2013 American Community Survey

## Program Administration

Per AB1600, a portion of TIM Fee program funds must be set aside to pay for on-going administration of the program and for periodic updates. For similar programs in California this percentage typically ranges between two and five percent of total program costs. In El Dorado County, approximately 2-
$3 \%$ of total TIM Fee costs are set aside for program administration. This equates to $\$ 11$ million over the 20 -year horizon of the program.

## DISCOUNTED FAIR SHARE

Per California Code-Section 66005.1 (effective January 1, 2011), housing development projects that satisfy all of the following "Smart Growth" characteristics shall be provided a discounted fee:

- The housing development is located within one-half mile of a transit station and there is direct access between the housing development and the transit station along a barrier-free walkable pathway not exceeding one-half mile in length.
- Convenience retail uses, including a store that sells food, are located within one-half mile of the housing development.
- The housing development provides either the minimum number of parking spaces required by the local ordinance, or no more than one onsite parking space for zero- to two-bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.

A discounted fee amount of $15 \%$ has been established based on Smart Growth Trip Generation Study (SANDAG, June 2010). This study compared the vehicle trip generation characteristics of seven development projects in the San Diego region with similar "smart growth" characteristics identified above. The average reduction in trip generation was shown to be approximately $15 \%$ relative to the Institute of Transportation Engineers (ITE) based trip generation factors for housing developments without these characteristics.

As used in this section, "housing development" means a development project with common ownership and financing consisting of residential use or mixed use where not less than 50 percent of the floor space is for residential use. For the purposes of this section, "transit station" has the meaning set forth in paragraph (4) of subdivision (b) of Section 65460.1. "Transit station" includes planned transit stations otherwise meeting this definition whose construction is programmed to be completed prior to the scheduled completion and occupancy of the housing development. Transit headway criteria of 10 minutes or less at a transit hub served by three or more transit service lines is defined as cumulative headway versus individual service line headways.

The applicant/developer will be responsible for conducting the initial analysis of the relationship of the new project to the criteria in order to consider eligibility for the discount. El Dorado County will need to verify accuracy for final determination of project's eligibility for the discount on a case by case basis.

## ATTACHMENT A

## ROADWAY SEGMENT VOLUME FORECASTS

(state highway segments presented by post-mile)
(local roadway segments presented in alphabetical order)

Volume Forecasts for State Facilities

| Route | Postmile | Segment Length |  | 2013 Caltrans Volumes Published AADT x K x D |  |  |  | Type | Model Volumes - AM(Interim Step - Not Used for LOS Operations) |  |  |  | Model Volume - PM(Interim Step - Not Used for Los Operations) |  |  |  | Final Adjusted Forecast Volume (Final Volumes Used for LOS Operations) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { AM } \\ \text { EB/NB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \mathrm{AM} \\ \mathrm{WB} / \mathrm{SB} \\ \mathrm{PHV} \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { EB/NB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { WB/SB } \\ \text { PHV } \end{gathered}$ |  | $\begin{gathered} \text { EB/NB } \\ 2015 \end{gathered}$ | $\begin{gathered} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \end{gathered}$ | $\begin{gathered} \hline \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2015 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { WB/SB } \\ \text { 2035 } \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP AM } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ \text { 2035 } \\ \text { Amended } \\ \text { GP AM } \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{EB} / \mathrm{NB} \\ 2035 \\ \text { Amended } \\ \text { GP PM } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP PM } \\ \hline \end{gathered}$ |
| 50 | 0 |  | SACRAMENTO/EL DORADO COUNTY LINE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 |  | 0.857 |  | 2470 | 3790 | 4749 | 1879 | Freeway | 3003 | 4800 | 5525 | 7040 | 5805 | 7449 | 3800 | 5311 | 4,110 | 5,070 | 6,250 | 3,010 |
|  | 0.857 |  | LATROBE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.375 |  | 1234 | 3696 | 3400 | 2350 | Freeway | 1757 | 3062 | 3864 | 5705 | 3686 | 5425 | 2109 | 3589 | 2,350 | 5,500 | 5,080 | 3,920 |
| 50 | 3.232 |  | BASS LAKE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.73 |  | 1379 | 3102 | 3331 | 2095 | Freeway | 1934 | 2978 | 4098 | 4876 | 3736 | 4897 | 2391 | 3697 | 2,280 | 3,790 | 4,430 | 3,330 |
| 50 | 4.962 |  | CAMBRIDGE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.608 |  | 1700 | 2610 | 3010 | 2080 | Freeway | 1981 | 2980 | 3499 | 4018 | 3346 | 4213 | 2244 | 3410 | 2,630 | 3,070 | 3,840 | 3,210 |
| 50 | 6.57 |  | CAMERON PARK DRIVE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.994 |  | 1730 | 2650 | 3060 | 2110 | Freeway | 1710 | 2261 | 3077 | 3479 | 2815 | 3360 | 1893 | 2576 | 2,290 | 3,030 | 3,630 | 2,840 |
| 50 | 8.564 |  | PONDEROSA ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.731 |  | 1340 | 2060 | 2305 | 1891 | Freeway | 1531 | 2013 | 2468 | 3011 | 2347 | 2934 | 1694 | 2316 | 1,800 | 2,560 | 2,890 | 2,550 |
| 50 | 10.295 |  | SHINGLE SPRINGS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.895 |  | 1330 | 2040 | 2360 | 1630 | Freeway | 1531 | 2013 | 2468 | 3011 | 2347 | 2934 | 1694 | 2316 | 1,790 | 2,540 | 2,950 | 2,240 |
| 50 | 12.19 |  | Greenstone road |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.821 |  | 1100 | 1770 | 1910 | 1680 | Freeway | 1643 | 2088 | 2513 | 2896 | 2438 | 2918 | 1817 | 2311 | 1,480 | 2,100 | 2,340 | 2,160 |
| 50 | 14.011 |  | EL DORADO ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.044 |  | 1070 | 1740 | 1870 | 1640 | Freeway | 1648 | 2066 | 2404 | 2729 | 2337 | 2717 | 1749 | 2181 | 1,420 | 2,020 | 2,220 | 2,060 |
| 50 | 15.055 |  | MISSOURI FLAT ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.774 |  | 1220 | 1980 | 2130 | 1870 | Freeway | 1323 | 1660 | 1968 | 2259 | 1885 | 2212 | 1466 | 1848 | 1,550 | 2,280 | 2,480 | 2,310 |
| 50 | 15.829 |  | PLACERVILLE, FAIRGROUNDS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.161 |  | 920 | 1490 | 1610 | 1410 | Freeway | 1266 | 1539 | 2155 | 2235 | 2035 | 2297 | 1470 | 1756 | 1,160 | 1,560 | 1,850 | 1,700 |
| 50 | 16.99 |  | WEST PLACERVILLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.43 |  | 1140 | 1850 | 1990 | 1750 | Freeway | 1266 | 1539 | 2155 | 2235 | 2035 | 2297 | 1470 | 1756 | 1,400 | 1,930 | 2,250 | 2,070 |
| 50 | 17.42 |  | EB OfF TO MAIN STREET |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.1 |  | 1200 | 1940 | 2090 | 1840 | Multi-lane | 1356 | 1726 | 2249 | 2593 | 2149 | 2678 | 1639 | 2114 | 1,550 | 2,270 | 2,620 | 2,350 |
| 50 | 17.52 |  | PLACERVILLE, CANAL STREET |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.147 |  | 1010 | 2050 | 2130 | 1570 | Multi-lane | 1356 | 1726 | 2192 | 2403 | 2149 | 2678 | 1799 | 2028 | 1,340 | 2,260 | 2,660 | 1,790 |
| 50 | 17.667 |  | PLACERVILLE, ICT. RTE. 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.121 |  | 900 | 1820 | 1890 | 1390 | Multi-lane | 1395 | 1668 | 2011 | 2252 | 2060 | 2313 | 1529 | 1822 | 1,130 | 2,050 | 2,140 | 1,680 |
| 50 | 17.788 |  | PLACERVILLE, COLOMA STREET |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.244 |  | 910 | 1850 | 1920 | 1410 | Multi-lane | 1395 | 1668 | 2011 | 2252 | 2060 | 2313 | 1529 | 1822 | 1,140 | 2,090 | 2,170 | 1,700 |
| 50 | 18.032 |  | PLACERVILLE, BEDFORD AVENUE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.485 |  | 760 | 1530 | 1590 | 1170 | Multi-lane | 1395 | 1668 | 2065 | 2314 | 2060 | 2313 | 1593 | 1896 | 980 | 1,750 | 1,820 | 1,440 |
| 50 | 18.517 |  | PLACERVILLE, MOSQUITO ROAD OH (BROADWAY) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.473 |  | 680 | 1370 | 1420 | 1040 | Freeway | 838 | 1018 | 1865 | 2064 | 1597 | 1868 | 1204 | 1430 | 850 | 1,550 | 1,680 | 1,260 |
| 50 | 18.99 |  | PLACERVILLE, SCHNELL SCHOOL ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.306 |  | 540 | 1090 | 1140 | 840 | Freeway | 838 | 1018 | 1855 | 2054 | 1556 | 1752 | 1037 | 1232 | 690 | 1,250 | 1,310 | 1,020 |
| 50 | 20.296 |  | PLACERVILLE, POINT VIEW DRIVE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.445 |  | 460 | 930 | 970 | 710 | Freeway | 816 | 958 | 1583 | 1715 | 1441 | 1580 | 923 | 1065 | 580 | 1,040 | 1,090 | 840 |
| 50 | 20.741 |  | NEW TOWN ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.216 |  | 460 | 940 | 980 | 720 | Multi-lane | 838 | 989 | 1622 | 1765 | 1472 | 1626 | 960 | 1114 | 580 | 1,060 | 1,110 | 860 |
| 50 | 23.957 |  | JUNCTION OLD HIGHWAY, CAMINO, WEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.992 |  | 260 | 840 | 940 | 620 | Multi-lane | 838 | 989 | 1622 | 1765 | 1472 | 1626 | 960 | 1114 | 360 | 950 | 1,070 | 750 |
| 50 | 25.949 |  | EAST CAMINO ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.893 |  | 270 | 870 | 980 | 640 | Freeway | 838 | 989 | 1622 | 1765 | 1472 | 1626 | 960 | 1114 | 370 | 990 | 1,110 | 770 |
| 50 | 28.842 |  | SAWMILL (POLLOCK PINES) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.457 |  | 380 | 670 | 790 | 460 | Freeway | 838 | 989 | 1622 | 1765 | 1472 | 1626 | 960 | 1114 | 490 | 780 | 910 | 580 |
| 50 | 31.299 |  | SLY PARK ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.92 |  | 230 | 410 | 480 | 280 | Two-lane | 838 | 989 | 1622 | 1765 | 1472 | 1626 | 960 | 1114 | 330 | 500 | 590 | 380 |
| 50 | 34.219 |  | OLD CARSON ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 5.553 |  | 310 | 540 | 650 | 380 | Multi-lane | 633 | 741 | 1168 | 1279 | 1038 | 1148 | 688 | 794 | 390 | 630 | 740 | 470 |
| 50 | 39.772 |  | ICEHOUSE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6.82 |  | 320 | 560 | 670 | 390 | Two-lane | 438 | 515 | 466 | 538 | 430 | 499 | 411 | 484 | 390 | 640 | 760 | 470 |
| 50 | 46.592 |  | W O ALDER RIDGE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Route | Postmile | $\begin{gathered} \text { Segment } \\ \text { Length } \end{gathered}$ | Description | 2013 Caltrans Volumes Published AADT x K x D |  |  |  | Type | Model Volumes - AM(Interim Step - Not Used for LOS Operations) |  |  |  |  |  |  |  | Final Adjusted Forecast Volume(Final Volumes Used for LOS Operations) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { AM } \\ \text { EB/NB } \\ \text { PHV } \\ \hline \end{gathered}$ | $\begin{gathered} \text { AM } \\ \text { WB/SB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { EB/NB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { WB/SB } \\ \text { PHV } \end{gathered}$ |  | $\begin{gathered} \text { EB/NB } \\ 2015 \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP } \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP } \end{gathered}$ | $\begin{gathered} \mathrm{EB} / \mathrm{NB} \\ 2015 \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP } \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \end{gathered}$ | $\begin{gathered} \hline \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \hline \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { EB//BB } \\ 2035 \\ \text { Amended } \\ \text { GP AM } \\ \hline \end{gathered}$ | WB/SB 2035 Amended GP AM | $\begin{gathered} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP PM } \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP PM } \\ \hline \end{gathered}$ |
| 50 |  | 2.36 |  | 320 | 560 | 650 | 380 | Two-lane | 430 | 502 | 454 | 529 | 417 | 487 | 401 | 469 | 390 | 650 | 740 | 450 |
|  | 48.952 |  | SILVER FORK ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 |  | 4.78 |  | 320 | 560 | 650 | 380 | Two-lane | 429 | 501 | 455 | 534 | 418 | 490 | 399 | 467 | 390 | 650 | 750 | 450 |
|  | 53.732 |  | WRIGHTS LAKE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 4.16 |  | 320 | 560 | 650 | 380 | Two-lane | 425 | 495 | 451 | 529 | 412 | 483 | 394 | 460 | 390 | 650 | 750 | 450 |
| 50 | 57.892 |  | STRAWBERRY LN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.3 |  | 320 | 560 | 650 | 380 | Two-lane | 425 | 495 | 451 | 529 | 412 | 483 | 394 | 460 | 390 | 650 | 750 | 450 |
| 50 | 60.192 |  | SLIPPERY FORD ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.33 |  | 320 | 560 | 650 | 380 | Two-lane | 425 | 495 | 451 | 529 | 412 | 483 | 394 | 460 | 390 | 650 | 750 | 450 |
| 50 | 63.522 |  | SIERRA-AT-TAHOE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.83 |  | 320 | 560 | 650 | 380 | Two-lane | 425 | 495 | 451 | 529 | 412 | 483 | 394 | 460 | 390 | 650 | 750 | 450 |
| 50 | 65.619 |  | ECHO LAKE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 425 | 495 | 451 | 529 | 412 | 483 | 394 | 460 |  |  |  |  |
| 49 | 0 |  | AMADOR/EL DORADO COUNTY LINE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.65 |  | 144 | 40 | 53 | 156 | Two-lane | 172 | 192 | 81 | 80 | 120 | 139 | 191 | 236 | 170 | 40 | 70 | 200 |
| 49 | 1.65 |  | NASHVILLE, SOUTH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6.702 |  | 249 | 68 | 92 | 270 | Two-lane | 172 | 192 | 81 | 80 | 120 | 139 | 191 | 236 | 280 | 70 | 110 | 330 |
| 49 | 8.352 |  | CHINA HILL ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.142 |  | 471 | 129 | 175 | 511 | Two-lane | 172 | 192 | 81 | 80 | 120 | 139 | 191 | 236 | 510 | 130 | 200 | 600 |
| 49 | 9.494 |  | EL DORADO, UNION MINE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.147 |  | 628 | 172 | 233 | 681 | Two-lane | 219 | 272 | 94 | 99 | 138 | 167 | 230 | 299 | 730 | 180 | 280 | 820 |
| 49 | 9.641 |  | EL DoRADO, PLEASANT VALLEY ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.598 |  | 883 | 243 | 327 | 958 | Two-lane | 439 | 519 | 191 | 243 | 271 | 355 | 445 | 553 | 1,010 | 310 | 420 | 1,130 |
| 49 | 11.239 |  | MISSOURI FLAT ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.62 |  | 982 | 269 | 364 | 1064 | Two-lane | 701 | 824 | 847 | 904 | 818 | 918 | 793 | 844 | 1,130 | 310 | 440 | 1,130 |
| 49 | 11.859 |  | DIAMOND SPRINGS, PLEASANT VALLEY ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.604 |  | 406 | 111 | 150 | 440 | Two-lane | 692 | 818 | 1073 | 1148 | 1076 | 1190 | 786 | 953 | 510 | 160 | 220 | 580 |
| 49 | 14.463 |  | PLACERVILLE, FISKE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.134 |  | 916 | 252 | 339 | 993 | Two-lane | 530 | 612 | 467 | 583 | 550 | 689 | 580 | 675 | 1,030 | 350 | 460 | 1,130 |
| 49 | 14.597 |  | PLACERVILLE, PACIFIC/ MAIN STREETS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.294 |  | 353 | 97 | 131 | 383 | Two-lane | 670 | 790 | 677 | 817 | 811 | 936 | 775 | 895 | 450 | 180 | 210 | 480 |
| 49 | 14.891 |  | PLACERVILLE, JCT. RTE. 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.794 |  | 445 | 122 | 165 | 483 | Two-lane | 477 | 455 | 589 | 554 | 756 | 784 | 369 | 488 | 450 | 130 | 190 | 630 |
| 49 | 15.685 |  | JCT. RTE. 193 NORTH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.755 |  | 308 | 84 | 114 | 334 | Two-lane | 258 | 341 | 488 | 506 | 501 | 525 | 326 | 376 | 400 | 100 | 130 | 390 |
| 49 | 16.44 |  | DIANA STREET |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.98 |  | 229 | 63 | 85 | 248 | Two-lane | 188 | 226 | 321 | 336 | 332 | 350 | 229 | 270 | 280 | 80 | 100 | 290 |
| 49 | 19.42 |  | GOLD HILL ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.445 |  | 147 | 40 | 55 | 160 | Two-lane | 145 | 182 | 277 | 287 | 287 | 304 | 181 | 220 | 190 | 50 | 70 | 200 |
| 49 | 22.865 |  | COLOMA, JCT. RTE. 153 WEST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.615 |  | 353 | 97 | 131 | 383 | Two-lane | 181 | 231 | 354 | 383 | 366 | 409 | 238 | 293 | 430 | 120 | 170 | 460 |
| 49 | 24.48 |  | MARSHALL GRADE ROAD (TO GEORGETOWN) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.71 |  | 229 | 63 | 85 | 248 | Two-lane | 187 | 278 | 252 | 316 | 290 | 380 | 233 | 340 | 330 | 110 | 150 | 360 |
| 49 | 28.19 |  | HASTINGS CREEK BRIDGE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6.276 |  | 229 | 63 | 85 | 248 | Two-lane | 111 | 143 | 209 | 246 | 227 | 279 | 145 | 188 | 280 | 90 | 130 | 310 |
| 49 | 34.466 |  | COOL, JCT. RTE. 193 EAST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.767 |  | 563 | 154 | 208 | 610 | Two-lane | 417 | 536 | 351 | 450 | 379 | 495 | 401 | 529 | 710 | 230 | 300 | 780 |
| 49 | 38.233 |  | EL DORADO/PLACER COUNTY LINE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 333 | 436 | 324 | 409 | 359 | 456 | 356 | 460 | 0 | 0 | 0 | 0 |
| 153 | 0 | 0 | JCT. RTE. 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 140 | 52 | 91 | 149 | Two-lane | 219 | 272 | 94 | 99 | 138 | 167 | 230 | 299 | 190 | 60 | 120 | 210 |
| 153 | 0.12 | 0.12 | COLD SPRINGS ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 5 | 4 | 5 | 6 | Two-lane |  |  |  |  |  |  |  |  | 10 | 10 | 10 | 10 |
| 153 | 0.55 | 0.55 | MARSHALL'S MONUMENT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | COOL.JCT. RTE. 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 193 |  | . 856 | COOL, JCT. $\mathrm{RIE}$. | 120 | 329 | 324 | 161 | wo-lane | 155 | 189 | 420 | 483 | 357 | 413 | 192 | 232 | 160 | 390 | 380 | 200 |


| Route | Postmile | $\underset{\substack{\text { Segment } \\ \text { Length }}}{\substack{\text { n }}}$ | Description | 2013 Caltrans Volumes Published AADT x K x D |  |  |  | Type | Model Volumes - AM (Interim Step - Not Used for LOS Operations) |  |  |  | Model Volume - PM(Interim Step - Not Used for LOS Operations) |  |  |  | Final Adjusted Forecast Volume (Final Volumes Used for LOS Operations) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { AM } \\ \text { EB/NB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \text { AM } \\ \text { WB/SB } \\ \text { PHV } \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { EB/NB } \\ \text { PHV } \\ \hline \end{gathered}$ | $\begin{gathered} \text { PM } \\ \text { WB/SB } \\ \text { PHV } \end{gathered}$ |  | $\begin{gathered} \text { EB/NB } \\ 2015 \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{array}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \end{gathered}$ | $\begin{gathered} \hline \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2015 \end{gathered}$ | $\begin{gathered} \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2015 \end{gathered}$ | $\begin{gathered} \hline \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP AM } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP AM } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { EB/NB } \\ 2035 \\ \text { Amended } \\ \text { GP PM } \\ \hline \end{gathered}$ | $\begin{gathered} \text { WB/SB } \\ 2035 \\ \text { Amended } \\ \text { GP PM } \\ \hline \end{gathered}$ |
| 193 | 0.856 |  | AMERICAN RIVER ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.313 |  | 144 | 397 | 391 | 194 | Two-lane | 148 | 179 | 385 | 439 | 333 | 386 | 184 | 222 | 180 | 460 | 450 | 240 |
| 193 | 2.169 |  | AUBURN LAKE TRAIL ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 10.021 |  | 111 | 306 | 302 | 150 | Two-lane | 148 | 179 | 385 | 439 | 333 | 386 | 184 | 222 | 140 | 360 | 360 | 190 |
| 193 | 12.19 |  | EVERGREEN COURT ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 0.509 |  | 109 | 300 | 296 | 147 | Two-lane | 101 | 131 | 80 | 103 | 94 | 124 | 108 | 144 | 150 | 360 | 360 | 190 |
| 193 | 12.699 |  | GEORGETOWN, LOWER MAIN STREET |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.406 |  | 215 | 59 | 76 | 221 | Two-lane | 65 | 89 | 74 | 101 | 76 | 111 | 66 | 99 | 270 | 90 | 120 | 300 |
| 193 | 16.105 |  | BLACK OAK MINE ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.295 |  | 133 | 37 | 47 | 137 | Two-lane | 43 | 45 | 55 | 65 | 51 | 63 | 45 | 50 | 140 | 50 | 60 | 150 |
| 193 | 19.4 |  | GARDEN VALLEY ROAD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 7.55 |  | 182 | 50 | 64 | 187 | Two-lane | 146 | 146 | 58 | 64 | 75 | 79 | 140 | 141 | 190 | 60 | 70 | 190 |
| 193 | 26.95 |  | JCT. RTE. 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Volume Forecasts for County Roadways

| NAME | LOCATION | Count Two-Way Volume |  | Model Two-Way Volume(Interim Step - Not Used for LOS Operations) |  |  |  | Final Adjusted Two-Way Forecast Volume (Final Volumes - Used for LOS Operations) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 AM | 2014 PM | 2015 AM | 2015 PM | 2035 Amended GP AM | $\begin{gathered} 2035 \text { Amended GP } \\ \text { PM } \\ \hline \end{gathered}$ | $\begin{gathered} 2035 \text { Amended GP } \\ \text { AM } \\ \hline \end{gathered}$ | $\begin{gathered} 2035 \text { Amended GP } \\ \text { PM } \\ \hline \end{gathered}$ |
| Bass Lake Rd | North of Country Club Dr | 1028 | 966 | 923 | 1012 | 1303 | 1411 | 1,430 | 1,360 |
| Bass Lake Rd | South of Green Valley Rd | 539 | 448 | 719 | 732 | 1060 | 1062 | 840 | 720 |
| Bassi Rd | West of Lotus Rd | 83 | 107 | 41 | 51 | 60 | 78 | 120 | 150 |
| Bedford Ave | At City Limit | 35 | 46 | 47 | 52 | 51 | 56 | 40 | 50 |
| Broadway | At City Limit | 256 | 309 | 536 | 562 | 654 | 695 | 350 | 420 |
| Bucks Bar Rd | South Pleasant Valley Rd | 411 | 412 | 453 | 463 | 507 | 524 | 470 | 470 |
| Bucks Bar Rd | North of Mt Aukum Rd | 294 | 307 | 400 | 419 | 458 | 482 | 350 | 370 |
| Cambridge Rd | North of Country Club Dr | 571 | 632 | 791 | 828 | 1051 | 1220 | 800 | 980 |
| Cambridge Rd | South of Country Club Dr | 584 | 709 | 990 | 1031 | 1231 | 1276 | 780 | 920 |
| Cambridge Rd | At US 50 Overcrossing | 641 | 810 | 321 | 669 | 655 | 956 | 1,150 | 1,130 |
| Cambridge Rd | South of Green Valley Rd | 379 | 394 | 524 | 562 | 837 | 887 | 650 | 680 |
| Cambridge Rd | North of Oxford Rd | 339 | 366 | 543 | 610 | 666 | 770 | 440 | 500 |
| Cameron Park Dr | North of Coach Ln | 1155 | 2022 | 1561 | 2130 | 2334 | 3201 | 1,830 | 3,070 |
| Cameron Park Dr | South of Hacienda Dr | 1236 | 1619 | 1356 | 1555 | 1623 | 1785 | 1,500 | 1,860 |
| Cameron Park Dr | South of Green Valley Rd | 685 | 781 | 836 | 907 | 1028 | 1104 | 860 | 970 |
| Cameron Park Dr | North of Mira Loma Dr | 929 | 1180 | 884 | 984 | 1126 | 1253 | 1,180 | 1,480 |
| Cameron Park Dr | South of Robin Ln | 533 | 901 | 607 | 822 | 1003 | 1267 | 910 | 1,370 |
| Cameron Park Dr | North of Robin Ln | 456 | 773 | 950 | 1343 | 1572 | 2162 | 920 | 1,420 |
| Carson Rd | East of Barkley Rd | 189 | 269 | 364 | 411 | 397 | 446 | 220 | 300 |
| Carson Rd | At Carson Ct | 82 | 149 | 25 | 43 | 26 | 43 | 90 | 150 |
| Carson Rd | West of Gatlin Rd | 57 | 137 | 43 | 53 | 47 | 57 | 70 | 150 |
| Carson Rd | East of Ponderosa Way | 139 | 208 | 166 | 181 | 184 | 196 | 160 | 230 |
| China Garden Rd | East of Missouri Flat Rd | 220 | 320 | 36 | 47 | 92 | 114 | 420 | 580 |
| China Garden Rd | North of SR 49 | 82 | 71 | 400 | 486 | 614 | 825 | 130 | 130 |
| Cold Springs Rd | South of Gold Hill Rd | 188 | 289 | 184 | 221 | 215 | 251 | 220 | 330 |
| Cold Springs Rd | South of SR 153 | 120 | 187 | 182 | 193 | 221 | 236 | 160 | 230 |
| Country Club Dr | East of Bass Lake Rd | 456 | 320 | 555 | 521 | 981 | 823 | 850 | 570 |
| Country Club Dr | West of Knollwood Dr | 515 | 277 | 258 | 297 | 487 | 495 | 860 | 470 |
| Country Club Dr | East of Cambridge Rd | 222 | 266 | 335 | 403 | 894 | 888 | 600 | 590 |
| Country Club Dr | East of Merrychase Dr | 381 | 197 | 494 | 430 | 660 | 581 | 530 | 310 |


| NAME | LOCATION | Count Two-Way Volume |  | Model Two-Way Volume (Interim Step - Not Used for LOS Operations) |  |  |  | Final Adjusted Two-Way Forecast Volume (Final Volumes - Used for LOS Operations) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 AM | 2014 PM | 2015 AM | 2015 PM | 2035 Amended GP AM | 2035 Amended GP PM | 2035 Amended GP AM | 2035 Amended GP |
| Country Club Dr | West of Cameron Park Dr | 254 | 375 | 287 | 374 | 638 | 785 | 57 | 790 |
| Durock Rd | West of S. Shingle Rd | 365 | 568 | 637 | 772 | 989 | 1109 | 650 | 870 |
| El Dorado Hills Blvd | South of Wilson Blvd | 1951 | 1895 | 1651 | 1999 | 1686 | 1946 | 1,990 | 1,900 |
| EI Dorado Hills Blvd | North of Wilson Blvd | 2018 | 1858 | 1516 | 1766 | 1437 | 1538 | 2,020 | 1,860 |
| El Dorado Hills Blvd | North of Saratoga Way | 2353 | 2458 | 3284 | 4070 | 3691 | 4268 | 2,710 | 2,620 |
| El Dorado Hills Blvd | South of Green Valley Rd | 448 | 367 | 446 | 510 | 424 | 430 | 450 | 370 |
| El Dorado Hills Blvd | North of Harvard Way | 1627 | 1497 | 1453 | 1583 | 1571 | 1668 | 1,760 | 1,58 |
| El Dorado Rd | South of US 50 | 381 | 388 | 398 | 490 | 615 | 789 | 600 | 660 |
| El Dorado Rd | North of Pleasant Valley Rd | 197 | 185 | 109 | 144 | 313 | 391 | 410 | 440 |
| El Dorado Rd | South of Missouri Flat Rd | 160 | 185 | 181 | 297 | 339 | 543 | 310 | 390 |
| Enterprise Dr | East of Forni Rd | 227 | 309 | 43 | 50 | 63 | 100 | 290 | 490 |
| Fairplay Rd | South of Mt Aukum Rd | 144 | 162 | 208 | 212 | 226 | 239 | 170 | 190 |
| Forni Rd | North of SR 49 | 322 | 280 | 37 | 56 | 64 | 120 | 460 | 480 |
| Forni Rd | West of Arroyo Vista Way | 85 | 141 | 93 | 125 | 107 | 144 | 100 | 170 |
| Francisco Dr | South of Green Valley Rd | 1050 | 1162 | 84 | 80 | 90 | 92 | 1,100 | 1,260 |
| Gold Hill Rd | East of Lotus Road | 231 | 142 | 143 | 166 | 183 | 204 | 290 | 180 |
| Gold Hill Rd | East of Cold Springs Rd | 64 | 45 | 65 | 63 | 79 | 74 | 80 | 60 |
| Gold Hill Rd | West of Cold Springs Rd | 243 | 144 | 142 | 165 | 173 | 193 | 290 | 180 |
| Green Valley Rd | West of Sophia Pkwy | 1881 | 2066 | 1725 | 1724 | 2702 | 2932 | 2,910 | 3,400 |
| Green Valley Rd | West of Weber Creek | 277 | 376 | 120 | 143 | 172 | 213 | 370 | 510 |
| Green Valley Rd | West of Silva Valley Rd | 951 | 1119 | 1414 | 1421 | 1664 | 1713 | 1,160 | 1,380 |
| Green Valley Rd | East of Mormon Island Dr | 1998 | 2480 | 2104 | 1840 | 2694 | 2737 | 2,580 | 3,540 |
| Green Valley Rd | West of Mormon Island Dr | 2005 | 2481 | 2104 | 1840 | 2694 | 2737 | 2,590 | 3,540 |
| Green Valley Rd | East of Sophia Pkwy | 2020 | 2475 | 2129 | 1875 | 2745 | 2822 | 2,630 | 3,580 |
| Green Valley Rd | East of Francisco Dr | 1208 | 1071 | 1280 | 1193 | 1668 | 1620 | 1,735 | 1,715 |
| Green Valley Rd | West of Bass Lake Rd | 1289 | 945 | 969 | 947 | 1159 | 1138 | 1,520 | 1,140 |
| Green Valley Rd | East of Bass Lake Rd | 1138 | 996 | 1382 | 1400 | 1738 | 1779 | 1,470 | 1,330 |
| Green Valley Rd | East of La Crescenta Dr | 673 | 596 | 319 | 325 | 580 | 609 | 1,090 | 1,000 |
| Green Valley Rd | East of Deer Valley Rd | 407 | 403 | 241 | 254 | 338 | 359 | 540 | 540 |
| Green Valley Rd | West of Lotus Rd | 607 | 709 | 740 | 729 | 908 | 915 | 770 | 900 |
| Green Valley Rd | West of Greenstone Rd | 368 | 379 | 277 | 300 | 324 | 382 | 430 | 480 |
| Green Valley Rd | West of Missouri Flat Rd | 868 | 740 | 341 | 356 | 386 | 424 | 950 | 850 |
| Green Valley Rd | West of Campus Dr | 392 | 424 | 341 | 356 | 386 | 424 | 440 | 500 |
| Greenstone Rd | North of US 50 | 257 | 246 | 298 | 319 | 356 | 403 | 320 | 320 |
| Greenstone Rd | North of Mother Lode Dr | 93 | 112 | 61 | 65 | 96 | 108 | 140 | 180 |
| Grizzly Flat Rd | East of Mt Aukum Rd | 151 | 199 | 179 | 188 | 228 | 237 | 200 | 250 |
| Harvard Way | East of El Dorado Hills Blvd | 970 | 483 | 807 | 709 | 1057 | 961 | 1,250 | 700 |
| Harvard Way | West of Silva Valley Pkwy | 871 | 561 | 565 | 413 | 827 | 749 | 1,210 | 960 |
| Ice House Rd | North of US 50 | 37 | 71 | 9 | 9 | 9 | 8 | 40 | 80 |
| Latrobe Rd | North of County Line | 241 | 329 | 228 | 294 | 458 | 507 | 480 | 560 |
| Latrobe Rd | South of Investment Blvd | 373 | 449 | 385 | 437 | 663 | 691 | 650 | 710 |
| Latrobe Rd | North of Golden Foothill Pkwy | 2123 | 2287 | 1988 | 2290 | 3584 | 3839 | 3,780 | 3,840 |
| Latrobe Rd | North of Investment Blvd | 802 | 971 | 329 | 372 | 548 | 575 | 1,180 | 1,340 |
| Latrobe Rd | North of White Rock Rd | 2557 | 2695 | 2553 | 2687 | 3368 | 3529 | 3,380 | 3,540 |
| Lotus Rd | South of Thompson Hill Rd | 346 | 441 | 462 | 449 | 591 | 609 | 460 | 600 |
| Lotus Rd | North Green Valley Rd | 565 | 703 | 760 | 756 | 942 | 956 | 730 | 900 |
| Lotus Rd | South of SR 49 | 260 | 354 | 446 | 454 | 591 | 638 | 380 | 520 |
| Luneman Rd | West of Lotus Rd | 333 | 196 | 227 | 248 | 258 | 278 | 380 | 230 |
| Marshall Rd | East of SR 49 | 315 | 315 | 271 | 264 | 330 | 328 | 380 | 390 |
| Marshall Rd | East of Garden Valley Rd | 432 | 408 | 349 | 352 | 423 | 431 | 520 | 500 |
| Marshall Rd | South of Lower Main St | 37 | 50 | 228 | 226 | 294 | 307 | 80 | 110 |
| Meder Rd | East of Cameron Park Dr | 528 | 568 | 442 | 423 | 729 | 821 | 850 | 1,040 |


| NAME | LOCATION | Count Two-Way Volume |  | Model Two-Way Volume (Interim Step - Not Used for LOS Operations) |  |  |  | Final Adjusted Two-Way Forecast Volume (Final Volumes - Used for LOS Operations) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 AM | 2014 PM | 2015 AM | 2015 PM | 2035 Amended GP AM | 2035 Amended GP PM | 2035 Amended GP AM | 2035 Amended GP |
| Meder Rd | West of Ponderosa Rd | 420 | 436 | 379 | 349 | 506 | 544 | 56 | 660 |
| Missouri Flat Rd | West of El Dorado Rd | 844 | 714 | 247 | 310 | 309 | 391 | 990 | 850 |
| Missouri Flat Rd | East of El Dorado Rd | 801 | 835 | 431 | 477 | 499 | 575 | 900 | 970 |
| Missouri Flat Rd | South of China Garden Rd | 1174 | 1640 | 1201 | 1347 | 1207 | 1251 | 1,180 | 1,640 |
| Missouri Flat Rd | North of SR 49 | 1047 | 1307 | 1060 | 1175 | 1054 | 1072 | 1,050 | 1,310 |
| Missouri Flat Rd | North of Forni Rd | 1876 | 2686 | 1871 | 2196 | 2106 | 2509 | 2,120 | 3,040 |
| Missouri Flat Rd | South of Forni Rd | 1600 | 1986 | 1366 | 1603 | 1533 | 1785 | 1,790 | 2,200 |
| Mormon Emigrant Trl | East of Sly Park Rd | 38 | 63 | 161 | 165 | 214 | 221 | 80 | 110 |
| Mosquito Rd | At City Limit | 335 | 346 | 501 | 528 | 586 | 613 | 410 | 420 |
| Mosquito Rd | South of American River Bridge | 90 | 110 | 130 | 126 | 165 | 159 | 120 | 150 |
| Mother Lode Dr | West of Sunset Ln | 950 | 1068 | 1263 | 1345 | 1535 | 1583 | 1,190 | 1,290 |
| Mother Lode Dr | West of Pleasant Valley Rd | 642 | 757 | 762 | 808 | 1090 | 1179 | 950 | 1,120 |
| Mother Lode Dr | East of Pleasant Vally Rd | 229 | 347 | 170 | 226 | 235 | 295 | 310 | 440 |
| Mt Aukum Rd | North of County Line | 114 | 137 | 50 | 58 | 59 | 70 | 130 | 160 |
| Mt Aukum Rd | South of Bucks Bar Rd | 252 | 297 | 381 | 403 | 437 | 469 | 300 | 360 |
| Mt Aukum Rd | South of Pleasant Valley Rd | 190 | 318 | 290 | 325 | 356 | 405 | 250 | 400 |
| Mt Murphy Rd | North of SR 49 | 26 | 25 | 306 | 334 | 339 | 376 | 50 | 50 |
| Mt Murphy Rd | South of Marshall Rd | 54 | 97 | 182 | 195 | 205 | 225 | 70 | 120 |
| Newtown Rd | North of Pioneer Hill Rd | 231 | 240 | 347 | 361 | 414 | 417 | 290 | 290 |
| Newtown Rd | East of Broadway Rd | 299 | 323 | 420 | 436 | 486 | 493 | 360 | 380 |
| Newtown Rd | North of Pleasant Valley Rd | 215 | 223 | 270 | 262 | 348 | 332 | 290 | 290 |
| Old French Town Rd | South of Mother Lode Dr | 83 | 104 | 150 | 159 | 224 | 242 | 150 | 180 |
| Omo Ranch Rd | East of Mt Aukum Rd | 63 | 56 | 54 | 60 | 60 | 67 | 70 | 70 |
| Oxford Rd | East of Salida Way | 262 | 335 | 527 | 602 | 901 | 1052 | 550 | 690 |
| Palmer Dr | East of Cameron Park Dr | 449 | 873 | 560 | 764 | 799 | 1065 | 670 | 1,200 |
| Patterson Dr | South of Pleasant Valley Rd | 293 | 407 | 377 | 412 | 524 | 580 | 430 | 580 |
| Pleasant Valley Rd | East of Mother Lode Dr | 561 | 603 | 592 | 582 | 855 | 885 | 820 | 920 |
| Pleasant Valley Rd | East of Bucks Bar Rd | 473 | 443 | 394 | 402 | 461 | 482 | 550 | 530 |
| Pleasant Valley Rd | West of Oak Hill Rd | 901 | 970 | 864 | 892 | 923 | 961 | 970 | 1,050 |
| Pleasant Valley Rd | East of SR 49 | 1075 | 1203 | 1355 | 1455 | 1526 | 1679 | 1,230 | 1,410 |
| Pleasant Valley Rd | East of Cedar Ravine Rd | 861 | 860 | 824 | 844 | 943 | 981 | 990 | 1,000 |
| Pleasant Valley Rd | East of Newtown Rd | 429 | 442 | 406 | 409 | 492 | 511 | 520 | 550 |
| Pony Express Trl | East of Carson Rd | 203 | 262 | 244 | 256 | 275 | 293 | 240 | 300 |
| Pony Express Trl | East of Gilmore Rd | 237 | 414 | 453 | 494 | 532 | 587 | 300 | 500 |
| Pony Express Trl | West of Forebay Rd | 251 | 492 | 264 | 340 | 319 | 406 | 310 | 580 |
| Salmon Falls Rd | At New York Creek Bridge | 191 | 244 | 504 | 461 | 632 | 548 | 280 | 320 |
| Salmon Falls Rd | South of Malcolm Dixon Rd | 612 | 590 | 1030 | 1047 | 1205 | 1179 | 760 | 700 |
| Salmon Falls Rd | South of Pedro Hill Rd | 92 | 100 | 342 | 307 | 453 | 385 | 170 | 160 |
| Salmon Falls Rd | South of Rattlesnake Bar Rd | 31 | 38 | 342 | 307 | 453 | 385 | 50 | 90 |
| Serrano Pkwy | West of Bass Lake Rd | 491 | 466 | 727 | 633 | 1219 | 1073 | 910 | 850 |
| Shingle Springs Dr | South of US 50 | 475 | 221 | 152 | 183 | 412 | 611 | 1,020 | 650 |
| Silva Valley Pky | North of US 50 | 776 | 1052 | 715 | 648 | 2093 | 2130 | 2,160 | 2,540 |
| Silva Valley Pky | South of Green Valley Rd | 603 | 554 | 482 | 552 | 626 | 687 | 770 | 690 |
| Silva Valley Pky | North of Havard Way | 886 | 848 | 348 | 383 | 530 | 552 | 1,210 | 1,120 |
| Silva Valley Pky | South of Serrano Pkwy | 1185 | 975 | 627 | 547 | 1098 | 1108 | 1,870 | 1,760 |
| Snows Rd | North of Newtown Rd | 80 | 83 | 106 | 124 | 127 | 150 | 100 | 110 |
| Snows Rd | South of Carson Rd | 337 | 212 | 227 | 203 | 248 | 223 | 370 | 240 |
| South Shingle Rd | East of Latrobe Rd | 98 | 75 | 184 | 200 | 234 | 272 | 140 | 130 |
| South Shingle Rd | North of Barnett Ranch | 192 | 217 | 267 | 295 | 322 | 367 | 240 | 280 |
| South Shingle Rd | South of Sunset Ln | 434 | 555 | 382 | 423 | 524 | 659 | 590 | 830 |
| Starbuck Rd | North of Green Valley Rd | 113 | 149 | 110 | 128 | 158 | 177 | 170 | 210 |
| Union Ridge Rd | West of Hassler Rd | 32 | 42 | 26 | 31 | 29 | 35 | 40 | 50 |


| NAME | LOCATION | Count Two-Way Volume |  | Model Two-Way Volume (Interim Step - Not Used for LOS Operations) |  |  |  | Final Adjusted Two-Way Forecast Volume (Final Volumes - Used for LOS Operations) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 AM | 2014 PM | 2015 AM | 2015 PM | 2035 Amended GP AM | $\begin{gathered} 2035 \text { Amended GP } \\ \text { PM } \\ \hline \end{gathered}$ | 2035 Amended GP AM | $\begin{gathered} 2035 \text { Amended GP } \\ \text { PM } \\ \hline \end{gathered}$ |
| Wentworth Springs Rd | West of Quintette Rd | 29 | 50 | 38 | 36 | 51 | 49 | 50 | 70 |
| White Rock Rd | At County Line | 834 | 1026 | 1066 | 597 | 1875 | 1797 | 1,560 | 2,230 |
| White Rock Rd | East of Latrobe Rd | 1036 | 1444 | 1225 | 1220 | 1371 | 1406 | 1,180 | 1,650 |
| White Rock Rd | West of Latrobe Rd | 999 | 1121 | 1111 | 747 | 1634 | 1538 | 1,500 | 2,110 |
| Latrobe Rd | North of Golden Foothill Pkwy South | 1601 | 1819 | 1254 | 1392 | 1995 | 2103 | 2,450 | 2,640 |
| Serrano Pkwy | East of Silva Valley Pkwy | 1424 | 947 | 1314 | 1161 | 1906 | 1620 | 2,050 | 1,370 |
| Bass Lake Rd | North of Serrano Pkwy | 824 | 816 | 937 | 939 | 1223 | 1220 | 1,100 | 1,080 |
| French Creek Rd | North of Old French Town Rd | 178 | 214 | 269 | 271 | 343 | 281 | 250 | 230 |
| Ponderosa Rd | North of Jackpine Rd | 147 | 128 | 40 | 34 | 42 | 36 | 160 | 140 |
| N Shingle Rd | South of Green Valley Rd | 414 | 440 | 587 | 559 | 685 | 662 | 500 | 540 |
| Mother Lode Dr | East of French Creek Rd | 904 | 809 | 904 | 897 | 1090 | 1117 | 1,090 | 1,020 |
| Rock Creek Rd | East of SR 193 | 19 | 18 | 1 | 1 | 1 | 1 | 30 | 30 |
| White Rock Rd | West of Windfield Way | 824 | 816 | 1246 | 830 | 1977 | 1926 | 1,440 | 1,900 |
| El Dorado Hills Blvd | South of Francisco Dr | 1324 | 1299 | 1160 | 1307 | 1234 | 1345 | 1,410 | 1,340 |
| Sly Park Rd | East of Mt Aukum Rd | 242 | 272 | 232 | 246 | 271 | 289 | 290 | 320 |
| Sly Park Rd | East of Mormon Emigrant Trail | 234 | 324 | 401 | 416 | 490 | 508 | 310 | 410 |
| Sly Park Rd | South of Pony Express Trail | 581 | 734 | 419 | 506 | 493 | 591 | 670 | 840 |

## ATTACHMENT B

## EXISTING OPERATIONS RESULTS

(state highway segments presented by post-mile)
(local roadway segments presented in alphabetical order)

Table B-1. Existing LOS Results for US 50 Freeway Sections

| Route | Seg | $\begin{array}{\|c} \text { EB } \\ \text { Postmile } \end{array}$ | WB Postmile | Segment Length | East of Segment | West of Segment | LOS <br> Threshold | Eastbound |  |  |  |  |  | Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | AM Peak |  |  | PM Peak |  |  | AM Peak |  |  | PM Peak |  |  |
|  |  |  |  |  |  |  |  | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ |
| 50 | 1 | 0 | 0.857 | 0.857 | SACRAMENTO/EL DORADO COUNTY LINE | LATROBE ROAD | E | 65.00 | 13.95 | B | 64.51 | 24.59 | C | 63.91 | 26.24 | D | 65.00 | 12.38 | B |
| 50 | 2 | 0.857 | 3.232 | 2.375 | LATROBE ROAD | BASS LAKE ROAD | D | 65.00 | 6.97 | A | 65.00 | 17.46 | B | 64.22 | 25.46 | C | 65.00 | 15.49 | B |
| 50 | 3 | 3.232 | 4.962 | 1.73 | BASS LAKE ROAD | CAMBRIDGE ROAD | D | 65.00 | 11.03 | B | 64.01 | 26.00 | C | 65.00 | 21.12 | C | 65.00 | 13.82 | B |
| 50 | 4 | 4.962 | 6.57 | 1.608 | CAMBRIDGE ROAD | CAMERON PARK DRIVE | E | 65.00 | 13.60 | B | 64.85 | 23.18 | C | 65.00 | 17.77 | B | 65.00 | 13.71 | B |
| 50 | 5 | 6.57 | 8.564 | 1.994 | CAMERON PARK DRIVE | PONDEROSA ROAD | E | 65.00 | 15.16 | B | 63.93 | 26.19 | D | 64.90 | 22.84 | C | 65.00 | 17.58 | B |
| 50 | 6 | 8.564 | 10.295 | 1.731 | PONDEROSA ROAD | SHINGLE SPRINGS | D | 65.00 | 11.74 | B | 65.00 | 19.40 | C | 65.00 | 17.73 | B | 65.00 | 15.76 | B |
| 50 | 7 | 10.295 | 12.19 | 1.895 | SHINGLE SPRINGS | GREENSTONE ROAD | D | 65.00 | 11.65 | B | 65.00 | 19.86 | C | 65.00 | 17.56 | B | 65.00 | 13.58 | B |
| 50 | 8 | 12.19 | 14.011 | 1.821 | GREENSTONE ROAD | EL DORADO ROAD | D | 65.00 | 9.64 | A | 65.00 | 16.08 | B | 65.00 | 15.23 | B | 65.00 | 14.00 | B |
| 50 | 9 | 14.011 | 15.055 | 1.044 | EL DORADO ROAD | MISSOURI FLAT ROAD | E | 65.00 | 9.03 | A | 65.00 | 15.72 | B | 65.00 | 15.59 | B | 65.00 | 14.27 | B |
| 50 | 10 | 15.055 | 15.829 | 0.774 | MISSOURI FLAT ROAD | PLACERVILLE, FAIRGROUNDS | E | 65.00 | 7.12 | A | 65.00 | 11.94 | B | 65.00 | 12.28 | B | 65.00 | 10.85 | A |
| 50 | 11 | 15.829 | 16.99 | 1.161 | PLACERVILLE, FAIRGROUNDS | WEST PLACERVILLE | E | 65.00 | 7.77 | A | 65.00 | 13.54 | B | 65.00 | 13.35 | B | 65.00 | 12.27 | B |
| 50 | 12 | 16.99 | 17.42 | 0.43 | WEST PLACERVILLE | EB OFF TO MAIN STREET | E | 65.00 | 9.62 | A | 65.00 | 16.73 | B | 65.00 | 16.58 | B | 65.00 | 15.23 | B |
| 50 | 18 | 18.517 | 18.99 | 0.473 | PLACERVILLE, MOSQUITO ROAD | PLACERVILLE, SCHNELL SCHOOL ROAD | E | 55.00 | 7.16 | A | 55.00 | 14.96 | B | 55.00 | 14.43 | B | 55.00 | 10.95 | A |
| 50 | 19 | 18.99 | 20.296 | 1.306 | PLACERVILLE, SCHNELL SCHOOL ROAD | PLACERVILLE, POINT VIEW DRIVE | E | 55.00 | 5.69 | A | 55.00 | 12.01 | B | 55.00 | 11.48 | B | 55.00 | 8.85 | A |
| 50 | 20 | 20.296 | 20.741 | 0.445 | PLACERVILLE, POINT VIEW DRIVE | NEW TOWN ROAD | D | 65.00 | 4.10 | A | 65.00 | 8.64 | A | 65.00 | 8.29 | A | 65.00 | 6.33 | A |
| 50 | 23 | 25.949 | 28.842 | 2.893 | EAST CAMINO ROAD | SAWMILL (POLLOCK PINES) | E | 65.00 | 2.42 | A | 65.00 | 8.80 | A | 65.00 | 7.81 | A | 65.00 | 5.75 | A |
| 50 | 24 | 28.842 | 31.299 | 2.457 | SAWMILL (POLLOCK PINES) | SLY PARK ROAD | E | 65.00 | 3.40 | A | 65.00 | 7.07 | A | 65.00 | 6.00 | A | 65.00 | 4.12 | A |

Density expressed in $\mathrm{pc} / \mathrm{mi} / \mathrm{n}$, passenger cars per mile per lane
Level of service is based on density as described in Basic Freeway Segment, Chapter 11, HCM 2010

Table B-2. Existing LOS Results for US 50 Multilane Highway Sections

| Route | Seg | $\begin{array}{\|c\|} \text { EB } \\ \text { Postmile } \end{array}$ | WB Postmile | Segment Length | East of Segment | West of Segment | LOS <br> Threshold | Eastbound |  |  |  |  |  | Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | AM Peak |  |  | PM Peak |  |  | AM Peak |  |  | PM Peak |  |  |
|  |  |  |  |  |  |  |  | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ |
| 50 | 13 | 17.42 | 17.52 | 0.1 | EB OfF TO MAIN STREET | PLACERVILLE, CANAL STREET | E | 45.00 | 15.36 | B | 45.00 | 26.76 | D | 45.00 | 24.84 | C | 45.00 | 23.56 | C |
| 50 | 14 | 17.52 | 17.667 | 0.147 | PLACERVILLE, CANAL STREET | PLACERVILLE, JCT. RTE. 49 | F | 45.00 | 8.62 | A | 45.00 | 18.18 | C | 45.00 | 26.24 | D | 45.00 | 20.09 | C |
| 50 | 15 | 17.667 | 17.788 | 0.121 | PLACERVILLE, JCT. RTE. 49 | PLACERVILLE, COLOMA STREET | F | 45.00 | 7.69 | A | 45.00 | 16.18 | B | 45.00 | 23.38 | C | 45.00 | 17.84 | B |
| 50 | 16 | 17.788 | 18.032 | 0.244 | PLACERVILLE, COLOMA STREET | PLACERVILLE, BEDFORD AVENUE | F | 45.00 | 7.78 | A | 45.00 | 16.42 | B | 45.00 | 23.76 | C | 45.00 | 18.11 | C |
| 50 | 17 | 18.032 | 18.517 | 0.485 | PLACERVILLE, BEDFORD AVENUE | PLACERVILLE, MOSQUITO ROAD OH | F | 45.00 | 6.51 | A | 45.00 | 13.64 | B | 45.00 | 19.69 | C | 45.00 | 15.04 | B |
| 50 | 21 | 20.741 | 23.957 | 3.216 | NEW TOWN ROAD | JUNCTION OLD HIGHWAY, CAMINO, WEST | D | 60.00 | 4.47 | A | 60.00 | 9.53 | A | 60.00 | 9.13 | A | 60.00 | 7.00 | A |
| 50 | 22 | 23.957 | 25.949 | 1.992 | JUNCTION OLD HIGHWAY, CAMINO, WEST | EAST CAMINO ROAD | E | 60.00 | 2.52 | A | 60.00 | 9.13 | A | 60.00 | 8.17 | A | 60.00 | 6.02 | A |
| 50 | 26 | 34.219 | 39.772 | 5.553 | OLD CARSON ROAD | ICEHOUSE ROAD | D | 50.00 | 3.60 | A | 50.00 | 7.54 | A | 50.00 | 6.26 | A | 50.00 | 4.40 | A |

Density expressed in $/ \mathrm{mi} / \mathrm{ln}$, passerger cas per mie per
Level of service for multi-lane highways is based on density as described in Chapter 14, HCM 2010

Table B-3. Existing LOS Results for Two-Lane State Highways (SR 49, US 50, SR 153, SR 193)


Table B-4. Existing LOS Results for Local Roadways

| ID | Name | Location | Area | Type | LOS <br> Threshold | 2014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | LOS | PM Volume | LOS |
| 1 | Bass Lake Rd | North of Country Club Dr | Rural | 2AU | D | 1028 | D | 966 | D |
| 2 | Bass Lake Rd | South of Green Valley Rd | Community Region | 2AU | E | 539 | A-C | 448 | A-C |
| 3 | Bass Lake Rd | North of Serrano Pkwy | Community Region | 2 AU | E | 824 | A-C | 816 | A-C |
| 4 | Bassi Rd | West of Lotus Rd | Rural | 2AU | D | 83 | A-C | 107 | A-C |
| 5 | Bedford Ave | At City Limit | Rural | 2 AU | D | 35 | A-C | 46 | A-C |
| 6 | Broadway | At City Limit | Community Region | 2 AU | E | 256 | A-C | 309 | A-C |
| 7 | Bucks Bar Rd | South Pleasant Valley Rd | Rural | 2 AU | D | 411 | A-C | 412 | A-C |
| 8 | Bucks Bar Rd | North of Mt Aukum Rd | Rural | 2 AU | D | 294 | A-C | 307 | A-C |
| 9 | Cambridge Rd | North of Country Club Dr | Exception F | 2 AU | F | 571 | A-C | 632 | A-C |
| 10 | Cambridge Rd | South of Country Club Dr | Community Region | 2AU | E | 584 | A-C | 709 | A-C |
| 11 | Cambridge Rd | At US 50 Overcrossing | Community Region | 2 AU | E | 641 | A-C | 810 | A-C |
| 12 | Cambridge Rd | South of Green Valley Rd | Community Region | 2 AU | E | 379 | A-C | 394 | A-C |
| 13 | Cambridge Rd | North of Oxford Rd | Community Region | 2 AU | E | 339 | A-C | 366 | A-C |
| 14 | Cameron Park Dr | North of Coach Ln | Community Region | 4AD | E | 1155 | A-C | 2022 | D |
| 15 | Cameron Park Dr | South of Hacienda Dr | Community Region | 2AU | E | 1236 | D | 1619 | E |
| 16 | Cameron Park Dr | South of Green Valley Rd | Community Region | 2 AU | E | 685 | A-C | 781 | A-C |
| 17 | Cameron Park Dr | North of Mira Loma Dr | Community Region | 2 AU | E | 929 | D | 1180 | D |
| 18 | Cameron Park Dr | South of Robin Ln | Community Region | 2 AU | E | 533 | A-C | 901 | D |
| 19 | Cameron Park Dr | North of Robin Ln | Exception F | 2 AU | F | 456 | A-C | 773 | A-C |
| 20 | Carson Rd | East of Barkley Rd | Community Region | 2 AU | E | 189 | A-C | 269 | A-C |
| 21 | Carson Rd | At Carson Ct | Rural | 2AU | D | 82 | A-C | 149 | A-C |
| 22 | Carson Rd | West of Gatlin Rd | Rural | 2 AU | D | 57 | A-C | 137 | A-C |
| 23 | Carson Rd | East of Ponderosa Way | Community Region | 2 AU | E | 139 | A-C | 208 | A-C |
| 24 | China Garden Rd | East of Missouri Flat Rd | Community Region | 2AU | E | 220 | A-C | 320 | A-C |
| 25 | China Garden Rd | North of SR 49 | Community Region | 2 AU | E | 82 | A-C | 71 | A-C |
| 26 | Cold Springs Rd | South of Gold Hill Rd | Rural | 2 AU | D | 188 | A-C | 289 | A-C |
| 27 | Cold Springs Rd | South of SR 153 | Rural | 2 AU | D | 120 | A-C | 187 | A-C |
| 28 | Country Club Dr | East of Bass Lake Rd | Rural | 2 AU | D | 456 | A-C | 320 | A-C |
| 29 | Country Club Dr | West of Knollwood Dr | Community Region | 2 AU | E | 515 | A-C | 277 | A-C |
| 30 | Country Club Dr | East of Cambridge Rd | Community Region | 2 AU | E | 222 | A-C | 266 | A-C |
| 31 | Country Club Dr | East of Merrychase Dr | Community Region | 2 AU | E | 381 | A-C | 197 | A-C |
| 32 | Country Club Dr | West of Cameron Park Dr | Community Region | 2 AU | E | 254 | A-C | 375 | A-C |
| 33 | Durock Rd | West of S. Shingle Rd | Community Region | 2 AU | E | 365 | A-C | 568 | A-C |
| 34 | El Dorado Hills Blvd | South of Wilson Blvd | Community Region | 4AD | E | 1951 | D | 1895 | D |
| 35 | El Dorado Hills Blvd | North of Wilson Blvd | Community Region | 4AD | E | 2018 | D | 1858 | D |
| 36 | El Dorado Hills Blvd | North of Saratoga Way | Community Region | 4AD | E | 2353 | D | 2458 | D |
| 37 | El Dorado Hills Blvd | South of Francisco Dr | Community Region | 2 AU | E | 1324 | D | 1299 | D |
| 38 | El Dorado Hills Blvd | South of Green Valley Rd | Community Region | 2 AU | E | 448 | A-C | 367 | A-C |
| 39 | El Dorado Hills Blvd | North of Harvard Way | Community Region | 4AD | E | 1627 | A-C | 1497 | A-C |
| 40 | El Dorado Rd | South of US 50 | Community Region | 2 AU | E | 381 | A-C | 388 | A-C |
| 41 | El Dorado Rd | North of Pleasant Valley Rd | Community Region | 2 AU | E | 197 | A-C | 185 | A-C |
| 42 | El Dorado Rd | South of Missouri Flat Rd | Community Region | 2AU | E | 160 | A-C | 185 | A-C |
| 43 | Enterprise Dr | East of Forni Rd | Community Region | 2AU | E | 227 | A-C | 309 | A-C |
| 44 | Fairplay Rd | South of Mt Aukum Rd | Rural | 2AU | D | 144 | A-C | 162 | A-C |
| 45 | Forni Rd | North of SR 49 | Community Region | 2 AU | E | 322 | A-C | 280 | A-C |
| 46 | Forni Rd | West of Arroyo Vista Way | Community Region | 2 AU | E | 85 | A-C | 141 | A-C |
| 47 | Francisco Dr | South of Green Valley Rd | Community Region | 2 AU | E | 1050 | D | 1162 | D |
| 48 | French Creek Rd | North of Old French Town Rd | Rural | 2 AU | D | 178 | A-C | 214 | A-C |
| 49 | Gold Hill Rd | East of Lotus Road | Rural | 2 AU | D | 231 | A-C | 142 | A-C |
| 50 | Gold Hill Rd | East of Cold Springs Rd | Rural | 2 AU | D | 64 | A-C | 45 | A-C |
| 51 | Gold Hill Rd | West of Cold Springs Rd | Rural | 2 AU | D | 243 | A-C | 144 | A-C |
| 52 | Green Valley Rd | West of Sophia Pkwy | Community Region | 2 AU | E | 1881 | F | 2066 | F |
| 53 | Green Valley Rd | West of Weber Creek | Rural | 2 AU | D | 277 | A-C | 376 | A-C |
| 54 | Green Valley Rd | West of Silva Valley Rd | Community Region | 2AU | E | 951 | D | 1119 | D |
| 55 | Green Valley Rd | East of Mormon Island Dr | Community Region | 4AD | E | 1998 | D | 2480 | D |
| 56 | Green Valley Rd | West of Mormon Island Dr | Community Region | 4AD | E | 2005 | D | 2481 | D |
| 57 | Green Valley Rd | East of Sophia Pkwy | Community Region | 4AD | E | 2020 | D | 2475 | D |
| 58 | Green Valley Rd | East of Francisco Dr | Community Region | 2AU | E | 1208 | E | 1071 | E |
| 59 | Green Valley Rd | West of Bass Lake Rd | Community Region | 2AU | E | 1289 | E | 945 | E |
| 60 | Green Valley Rd | East of Bass Lake Rd | Community Region | 2 AU | E | 1138 | D | 996 | D |
| 61 | Green Valley Rd | East of La Crescenta Dr | Community Region | 2 AU | E | 673 | D | 596 | D |
| 62 | Green Valley Rd | East of Deer Valley Rd | Rural | 2 AU | D | 407 | C | 403 | C |
| 63 | Green Valley Rd | West of Lotus Rd | Rural | 2 AU | D | 607 | D | 709 | D |
| 64 | Green Valley Rd | West of Greenstone Rd | Rural | 2 AU | D | 368 | A-C | 379 | A-C |
| 65 | Green Valley Rd | West of Missouri Flat Rd | Community Region | 2 AU | E | 868 | D | 740 | A-C |
| 66 | Green Valley Rd | West of Campus Dr | Rural | 2 AU | D | 392 | A-C | 424 | A-C |
| 67 | Greenstone Rd | North of US 50 | Rural | 2 AU | D | 257 | A-C | 246 | A-C |
| 68 | Greenstone Rd | North of Mother Lode Dr | Community Region | 2 AU | E | 93 | A-C | 112 | A-C |


| ID | Name | Location | Area | Type | LOS <br> Threshold | 2014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | LOS | PM Volume | LOS |
| 69 | Grizzly Flat Rd | East of Mt Aukum Rd | Rural | 2AU | D | 151 | A-C | 199 | A-C |
| 70 | Harvard Way | East of El Dorado Hills Blvd | Community Region | 4AU | E | 970 | A-C | 483 | A-C |
| 71 | Harvard Way | West of Silva Valley Pkwy | Community Region | 4AU | E | 871 | A-C | 561 | A-C |
| 72 | Ice House Rd | North of US 50 | Rural | 2AU | D | 37 | A-C | 71 | A-C |
| 73 | Latrobe Rd | North of County Line | Rural | 2AU | D | 241 | A-C | 329 | A-C |
| 74 | Latrobe Rd | South of Investment Blvd | Community Region | 2AU | E | 373 | A-C | 449 | A-C |
| 75 | Latrobe Rd | North of Golden Foothill Pkwy South | Community Region | 4AD | E | 1601 | A-C | 1819 | A-C |
| 76 | Latrobe Rd | North of Investment Blvd | Community Region | 2AU | E | 802 | A-C | 971 | D |
| 77 | Latrobe Rd | North of Golden Foothill Pkwy | Community Region | 4AD | E | 2123 | D | 2287 | D |
| 78 | Latrobe Rd | North of White Rock Rd | Community Region | 6AD | E | 2557 | A-C | 2695 | A-C |
| 79 | Lotus Rd | South of Thompson Hill Rd | Rural | 2AU | D | 346 | A-C | 441 | A-C |
| 80 | Lotus Rd | North Green Valley Rd | Rural | 2AU | D | 565 | A-C | 703 | A-C |
| 81 | Lotus Rd | South of SR 49 | Rural | 2AU | D | 260 | A-C | 354 | A-C |
| 82 | Luneman Rd | West of Lotus Rd | Rural | 2 AU | D | 333 | A-C | 196 | A-C |
| 83 | Marshall Rd | East of SR 49 | Rural | 2AU | D | 315 | A-C | 315 | A-C |
| 84 | Marshall Rd | East of Garden Valley Rd | Rural | 2AU | D | 432 | A-C | 408 | A-C |
| 85 | Marshall Rd | South of Lower Main St | Rural | 2AU | D | 37 | A-C | 50 | A-C |
| 86 | Meder Rd | East of Cameron Park Dr | Community Region | 2AU | E | 528 | A-C | 568 | A-C |
| 87 | Meder Rd | West of Ponderosa Rd | Community Region | 2AU | E | 420 | A-C | 436 | A-C |
| 88 | Missouri Flat Rd | West of El Dorado Rd | Community Region | 2AU | E | 844 | A-C | 714 | A-C |
| 89 | Missouri Flat Rd | East of El Dorado Rd | Community Region | 2AU | E | 801 | A-C | 835 | A-C |
| 90 | Missouri Flat Rd | South of China Garden Rd | Community Region | 2AU | E | 1174 | D | 1640 | E |
| 91 | Missouri Flat Rd | North of SR 49 | Community Region | 2AU | E | 1047 | D | 1307 | D |
| 92 | Missouri Flat Rd | North of Forni Rd | Exception F | 4AD | F | 1876 | D | 2686 | D |
| 93 | Missouri Flat Rd | South of Forni Rd | Exception F | 4AD | F | 1600 | A-C | 1986 | D |
| 94 | Mormon Emigrant Trl | East of Sly Park Rd | Rural | 2AU | D | 38 | A-C | 63 | A-C |
| 95 | Mosquito Rd | At City Limit | Community Region | 2AU | E | 335 | A-C | 346 | A-C |
| 96 | Mosquito Rd | South of American River Bridge | Rural | 2AU | D | 90 | A-C | 110 | A-C |
| 97 | Mother Lode Dr | East of French Creek Rd | Community Region | 2AU | E | 904 | D | 809 | A-C |
| 98 | Mother Lode Dr | West of Sunset Ln | Community Region | 2AU | E | 950 | D | 1068 | D |
| 99 | Mother Lode Dr | West of Pleasant Valley Rd | Community Region | 2AU | E | 642 | A-C | 757 | A-C |
| 100 | Mother Lode Dr | East of Pleasant Vally Rd | Community Region | 2AU | E | 229 | A-C | 347 | A-C |
| 101 | Mt Aukum Rd | North of County Line | Rural | 2AU | D | 114 | A-C | 137 | A-C |
| 102 | Mt Aukum Rd | South of Bucks Bar Rd | Rural | 2AU | D | 252 | A-C | 297 | A-C |
| 103 | Mt Aukum Rd | South of Pleasant Valley Rd | Rural | 2AU | D | 190 | A-C | 318 | A-C |
| 104 | Mt Murphy Rd | North of SR 49 | Rural | 2AU | D | 26 | A-C | 25 | A-C |
| 105 | Mt Murphy Rd | South of Marshall Rd | Rural | 2AU | D | 54 | A-C | 97 | A-C |
| 106 | N Shingle Rd | South of Green Valley Rd | Rural | 2AU | D | 414 | A-C | 440 | A-C |
| 107 | Newtown Rd | North of Pioneer Hill Rd | Rural | 2AU | D | 231 | A-C | 240 | A-C |
| 108 | Newtown Rd | East of Broadway Rd | Community Region | 2AU | E | 299 | A-C | 323 | A-C |
| 109 | Newtown Rd | North of Pleasant Valley Rd | Rural | 2AU | D | 215 | A-C | 223 | A-C |
| 110 | Old French Town Rd | South of Mother Lode Dr | Community Region | 2AU | E | 83 | A-C | 104 | A-C |
| 111 | Omo Ranch Rd | East of Mt Aukum Rd | Rural | 2AU | D | 63 | A-C | 56 | A-C |
| 112 | Oxford Rd | East of Salida Way | Community Region | 2AU | E | 262 | A-C | 335 | A-C |
| 113 | Palmer Dr | East of Cameron Park Dr | Community Region | 2AU | E | 449 | A-C | 873 | D |
| 114 | Patterson Dr | South of Pleasant Valley Rd | Community Region | 2AU | E | 293 | A-C | 407 | A-C |
| 115 | Pleasant Valley Rd | East of Mother Lode Dr | Community Region | 2AU | E | 561 | A-C | 603 | A-C |
| 116 | Pleasant Valley Rd | East of Bucks Bar Rd | Community Region | 2AU | E | 473 | A-C | 443 | A-C |
| 117 | Pleasant Valley Rd | West of Oak Hill Rd | Community Region | 2AU | E | 901 | D | 970 | D |
| 118 | Pleasant Valley Rd | East of SR 49 | Community Region | 2AU | E | 1075 | D | 1203 | D |
| 119 | Pleasant Valley Rd | East of Cedar Ravine Rd | Community Region | 2AU | E | 861 | D | 860 | D |
| 120 | Pleasant Valley Rd | East of Newtown Rd | Community Region | 2AU | E | 429 | A-C | 442 | A-C |
| 121 | Ponderosa Rd | North of Jackpine Rd | Rural | 2AU | D | 147 | A-C | 128 | A-C |
| 122 | Pony Express Trl | East of Carson Rd | Community Region | 2 AU | E | 203 | A-C | 262 | A-C |
| 123 | Pony Express Trl | East of Gilmore Rd | Community Region | 2AU | E | 237 | A-C | 414 | A-C |
| 124 | Pony Express Trl | West of Forebay Rd | Community Region | 2AU | E | 251 | A-C | 492 | A-C |
| 125 | Rock Creek Rd | East of SR 193 | Rural | 2AU | D | 19 | A-C | 18 | A-C |
| 126 | Salmon Falls Rd | At New York Creek Bridge | Rural | 2 AU | D | 191 | A-C | 244 | A-C |
| 127 | Salmon Falls Rd | South of Malcolm Dixon Rd | Community Region | 2AU | E | 612 | A-C | 590 | A-C |
| 128 | Salmon Falls Rd | South of Pedro Hill Rd | Rural | 2AU | D | 92 | A-C | 100 | A-C |
| 129 | Salmon Falls Rd | South of Rattlesnake Bar Rd | Rural | 2AU | D | 31 | A-C | 38 | A-C |
| 130 | Serrano Pkwy | East of Silva Valley Pkwy | Community Region | 4AD | E | 1424 | A-C | 947 | A-C |
| 131 | Serrano Pkwy | West of Bass Lake Rd | Community Region | 2AU | E | 491 | A-C | 466 | A-C |
| 132 | Shingle Springs Dr | South of US 50 | Rural | 2AU | D | 475 | A-C | 221 | A-C |
| 133 | Silva Valley Pky | North of US 50 | Community Region | 2AU | E | 776 | A-C | 1052 | D |
| 134 | Silva Valley Pky | South of Green Valley Rd | Community Region | 2AU | E | 603 | A-C | 554 | A-C |
| 135 | Silva Valley Pky | North of Havard Way | Community Region | 2AU | E | 886 | D | 848 | A-C |
| 136 | Silva Valley Pky | South of Serrano Pkwy | Community Region | 4AD | E | 1185 | A-C | 975 | A-C |
| 137 | Sly Park Rd | East of Mt Aukum Rd | Rural | 2AU | D | 242 | A-C | 272 | A-C |
| 138 | Sly Park Rd | East of Mormon Emigrant Trail | Rural | 2AU | D | 234 | A-C | 324 | A-C |



# ATTACHMENT C 2035 FORECAST 

## AMENDED GENERAL PLAN OPERATIONS RESULTS

(state highway segments presented by post-mile) (local roadway segments presented in alphabetical order)

Table C-1. Amended General Plan LOS Results for US 50

| Route | Seg | EB Postmile | WB Postmile | Segment Length | East of Segment | West of Segment | LOS <br> Threshold | Eastbound |  |  |  |  |  | Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | AM Peak |  |  | PM Peak |  |  | AM Peak |  |  | PM Peak |  |  |
|  |  |  |  |  |  |  |  | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | $\operatorname{LOS}^{2}$ |
| 50 | 1 | 0 | 0.857 | 0.857 | SACRAMENTO/EL DORADO COUNTY LINE | LATROBE ROAD | E | 64.97 | 22.24 | C | 60.11 | 33.05 | D | Unstable | $>45$ | F | 65.00 | 21.65 | C |
| 50 | 2 | 0.857 | 3.232 | 2.375 | LATROBE ROAD | BASS LAKE ROAD | D | 65.00 | 12.71 | B | 64.34 | 25.10 | C | stable | >45 | F | 62.34 | 29.40 | D |
| 50 | 3 | 3.232 | 4.962 | 1.73 | BASS LAKE ROAD | CAMBRIDGE ROAD | D | 65.00 | 18.45 | C | 58.40 | 35.65 | E | 63.47 | 27.22 | D | 64.65 | 24.08 | C |
| 50 | 4 | 4.962 | 6.57 | 1.608 | CAMBRIDGE ROAD | CAMERON PARK DRIVE | E | 65.00 | 21.29 | C | 62.67 | 28.80 | D | 65.00 | 21.54 | C | 64.86 | 23.13 | C |
| 50 | 5 | 6.57 | 8.564 | 1.994 | CAMERON PARK DRIVE | PONDEROSA ROAD | E | 65.00 | 20.31 | C | 58.21 | 35.94 | E | 63.30 | 27.59 | D | 64.20 | 25.49 | C |
| 50 | 6 | 8.564 | 10.295 | 1.731 | PONDEROSA ROAD | SHINGLE SPRINGS | D | 65.00 | 15.96 | B | 64.00 | 26.03 | D | 64.92 | 22.73 | C | 64.93 | 22.64 | C |
| 50 | 7 | 10.295 | 12.19 | 1.895 | SHINGLE SPRINGS | GREENSTONE ROAD | D | 65.00 | 15.87 | B | 63.72 | 26.68 | D | 64.94 | 22.54 | C | 65.00 | 19.86 | C |
| 50 | 8 | 12.19 | 14.011 | 1.821 | GREENSTONE ROAD | EL DORADO ROAD | D | 65.00 | 13.12 | B | 65.00 | 20.75 | C | 65.00 | 18.62 | C | 65.00 | 19.15 | C |
| 50 | 9 | 14.011 | 15.055 | 1.044 | EL DORADO ROAD | MISSOURI FLAT ROAD | E | 65.00 | 12.59 | B | 65.00 | 19.68 | C | 65.00 | 17.91 | B | 65.00 | 18.27 | C |
| 50 | 10 | 15.055 | 15.829 | 0.774 | MISSOURI FLAT ROAD | PLACERVILLE, FAIRGROUNDS | E | 65.00 | 9.51 | A | 65.00 | 14.66 | B | 65.00 | 14.00 | B | 65.00 | 13.66 | B |
| 50 | 11 | 15.829 | 16.99 | 1.161 | PLACERVILLE, FAIRGROUNDS | WEST PLACERVILLE | E | 65.00 | 10.29 | A | 65.00 | 16.40 | B | 65.00 | 13.83 | B | 65.00 | 15.07 | B |
| 50 | 12 | 16.99 | 17.42 | 0.43 | WEST PLACERVILLE | EB OfF TO MAIN STREET | E | 65.00 | 12.41 | B | 65.00 | 19.95 | C | 65.00 | 17.11 | B | 65.00 | 18.35 | C |
| 50 | 18 | 18.517 | 18.99 | 0.473 | PLACERVILLE, MOSQUITO ROAD | PLACERVILLE, SCHNELL SCHOOL ROAD | E | 55.00 | 8.95 | A | 55.00 | 17.69 | B | 55.00 | 16.33 | B | 55.00 | 13.27 | B |
| 50 | 19 | 18.99 | 20.296 | 1.306 | PLACERVILLE, SCHNELL SCHOOL ROAD | PLACERVILLE, POINT VIEW DRIVE | E | 55.00 | 7.27 | A | 55.00 | 13.80 | B | 55.00 | 13.17 | B | 55.00 | 10.74 | A |
| 50 | 20 | 20.296 | 20.741 | 0.445 | PLACERVILLE, POINT VIEW DRIVE | NEW TOWN ROAD | D | 65.00 | 5.17 | A | 65.00 | 9.71 | A | 65.00 | 9.27 | A | 65.00 | 7.49 | A |
| 50 | 23 | 25.949 | 28.842 | 2.893 | EAST CAMINO ROAD | SAWMILL (POLLOCK PINES) | E | 65.00 | 3.32 | A | 65.00 | 9.97 | A | 65.00 | 8.89 | A | 65.00 | 6.91 | A |
| 50 | 24 | 28.842 | 31.299 | 2.457 | SAWMILL (POLLOCK PINES) | SLY PARK ROAD | E | 65.00 | 4.39 | A | 65.00 | 8.14 | A | 65.00 | 6.98 | A | 65.00 | 5.19 | A |

Density expressed in $\mathrm{pc} / \mathrm{mi} / \mathrm{ln}$, passenger cars per mile per lane
Level of service is based on density as described in Basic Freeway Segment, Chapter 11, HCM 2010
Indicates deficiency

Table C-2. Amended General Plan LOS Results for Multilane State Highways

|  |  |  |  |  |  |  |  |  |  | Eastb | ound |  |  |  |  | Westb | ound |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | AM Peak |  |  | PM Peak |  |  | AM Peak |  |  | PM Peak |  |
| Route | Seg | $\begin{array}{\|c\|} \text { EB } \\ \text { Postmile } \end{array}$ | WB Postmile | Segment Length | East of Segment | West of Segment | LOS <br> Threshold | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS $^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | LOS ${ }^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | $\operatorname{LOS}^{2}$ | Avg. Speed (mph) | Density ${ }^{1}$ (pcpmpl) | $\operatorname{LOS}^{2}$ |
| 50 | 13 | 17.42 | 17.52 | 0.1 | EB OFF TO MAIN STREET | PLACERVILLE, CANAL STREET | L | 45.00 | 19.84 | C | 44.47 | 33.95 | D | 45.00 | 29.07 | D | 45.00 | 30.09 | D |
| 50 | 14 | 17.52 | 17.667 | 0.147 | PLACERVILLE, CANAL STREET | PLACERVILLE, JCT. RTE. 49 | F | 45.00 | 11.42 | B | 45.00 | 22.71 | C | 45.00 | 28.93 | D | 45.00 | 22.91 | C |
| 50 | 15 | 17.667 | 17.788 | 0.121 | PLACERVILLE, JCT. RTE. 49 | PLACERVILLE, COLOMA STREET | F | 45.00 | 9.67 | A | 45.00 | 18.31 | C | 45.00 | 26.33 | D | 45.00 | 21.58 | C |
| 50 | 16 | 17.788 | 18.032 | 0.244 | PLACERVILLE, COLOMA STREET | PLACERVILLE, BEDFORD AVENUE | F | 45.00 | 9.76 | A | 45.00 | 18.58 | C | 45.00 | 26.84 | D | 45.00 | 21.82 | C |
| 50 | 17 | 18.032 | 18.517 | 0.485 | PLACERVILLE, BEDFORD AVENUE | PLACERVILLE, MOSQUITO ROAD OH | F | 45.00 | 8.40 | A | 45.00 | 15.60 | B | 45.00 | 22.51 | C | 45.00 | 18.53 | C |
| 50 | 21 | 20.741 | 23.957 | 3.216 | NEW TOWN ROAD | JUNCTION OLD HIGHWAY, CAMINO, WEST | D | 60.00 | 5.63 | A | 60.00 | 10.78 | A | 60.00 | 10.30 | A | 60.00 | 8.37 | A |
| 50 | 22 | 23.957 | 25.949 | 1.992 | JUNCTION OLD HIGHWAY, CAMINO, WEST | EAST CAMINO ROAD | E | 60.00 | 3.50 | A | 60.00 | 10.40 | A | 60.00 | 9.23 | A | 60.00 | 7.28 | A |
| 50 | 26 | 34.219 | 39.772 | 5.553 | OLD CARSON ROAD | ICEHOUSE ROAD | D | 50.00 | 4.52 | A | 50.00 | 8.60 | A | 50.00 | 7.32 | A | 50.00 | 5.46 | A |
| Density expressed in pc/mi/ln, passenger cars per mile per lane Level of service for multi-lane highways is based on density as described in Chapter 14, HCM 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table C-3. Amended General Plan LOS Results for Two-Lane State Highways

| Route | Seg | $\begin{array}{\|c\|} \hline \text { NB/EB } \\ \text { Postmile } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { SB/WB } \\ \text { Postmile } \\ \hline \end{array}$ | $\begin{gathered} \text { Segment } \\ \text { Length } \\ \hline \end{gathered}$ | North/East of Segment | South/West of Segment | LOS Threshold | Eastbound |  |  |  |  |  | Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | AM Peak |  |  | PM Peak |  |  | AM Peak |  |  | PM Peak |  |  |
|  |  |  |  |  |  |  |  | $\begin{array}{\|c} \hline \text { PTSF }^{1} \\ (\%) \\ \hline \end{array}$ | $\begin{gathered} \text { PFFS²}^{2} \\ (\%) \end{gathered}$ | Los $^{3}$ | $\begin{gathered} \mathrm{PTSF}^{1} \\ (\%) \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { PFFs }^{2} \\ (\%) \end{array}$ | Los $^{3}$ | $\begin{gathered} \text { PTSF }^{1} \\ (\%) \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { PFFS²}^{2} \\ (\%) \end{array}$ | Los $^{3}$ | $\begin{array}{\|c\|} \hline \text { PTSF }^{1} \\ (\%) \end{array}$ | $\begin{array}{\|c\|} \hline \text { PFFS }^{2} \\ (\%) \end{array}$ | Los ${ }^{3}$ |
| 49 | 1 | 0 | 1.65 | 1.65 | AMADOR/EL DORADO COUNTY LINE | NASHVILLE, SOUTH | D | 62.1\% | 89.3\% | c | 27.5\% | 86.3\% | A | 17.5\% | 87.5\% | A | 62.6\% | 87.0\% | C |
| 49 | 2 | 1.65 | 8.352 | 6.702 | NASHVILLE, SOUTH | CHINA HILL ROAD | D | 68.7\% | 86.6\% | c | 35.9\% | 86.0\% | A | 25.3\% | 87.3\% | A | 70.7\% | 83.3\% | D |
| 49 | 3 | 8.352 | 9.494 | 1.142 | CHINA HILL ROAD | EL DORADO, UNION MINE ROAD | D | 76.1\% | 82.9\% | D | 39.0\% | 83.3\% | A | 28.4\% | 85.3\% | A | 78.8\% | 79.1\% | D |
| 49 | 4 | 9.494 | 9.641 | 0.147 | EL DORADO, UNION MINE ROAD | EL DORADO, PLEASANT VALLEY ROAD | E | 84.7\% | 68.2\% | D | 49.6\% | 71.6\% | D | 36.8\% | 74.5\% | D | 88.6\% | 64.2\% | E |
| 49 | 5 | 9.641 | 11.239 | 1.598 | EL DORADO, PLEASANT VALLEY ROAD | MISSOURI FLAT ROAD | F | 97.1\% | 63.6\% | E | 62.8\% | 64.0\% | E | 53.4\% | 69.5\% | D | 94.0\% | 61.3\% | E |
| 49 | 6 | 11.239 | 11.859 | 0.62 | MISSOURI FLAT ROAD | DIAMOND SPRINGS, PLEASANT VALLEY ROAD | F | 99.2\% | 61.6\% | E | 64.1\% | 64.1\% | E | 54.3\% | 67.2\% | D | 93.2\% | 61.2\% | E |
| 49 | 7 | 11.859 | 14.463 | 2.604 | DIAMOND SPRINGS, PLEASANT VALLEY ROAD | PLACERVILLE, FISKE ROAD | E | 74.7\% | 77.7\% | D | 50.0\% | 79.5\% | B | 41.3\% | 81.1\% | B | 77.0\% | 75.7\% | D |
| 49 | 8 | 14.463 | 14.597 | 0.134 | PLACERVILLE, FISKE ROAD | PLACERVILLE, PACIFIC/ MAIN STREETS | E | 93.8\% | 62.7\% | E | 65.5\% | 62.8\% | E | 57.2\% | 63.8\% | E | 92.4\% | 55.6\% | E |
| 49 | 9 | 14.597 | 14.891 | 0.294 | PLACERVILLE, PACIFIC/ MAIN STREETS | PLACERVILLE, JCT. RTE. 50 | F | 73.3\% | 74.2\% | D | 42.6\% | 77.9\% | c | 38.6\% | 79.3\% | C | 73.4\% | 73.9\% | D |
| 49 | 10 | 14.891 | 15.685 | 0.794 | PLACERVILLE, JCT. RTE. 50 | JCT. RTE. 193 NORTH | F | 75.1\% | 76.8\% | C | 37.7\% | 75.7\% | c | 29.7\% | 78.7\% | c | 78.7\% | 67.9\% | D |
| 49 | 11 | 15.685 | 16.44 | 0.755 | JCT. RTE. 193 NORTH | dIANA STREET | D | 73.3\% | 80.5\% | C | 30.5\% | 80.1\% | c | 24.2\% | 81.6\% | C | 72.6\% | 79.6\% | c |
| 49 | 12 | 16.44 | 19.42 | 2.98 | DIANA STREET | GOLD HILL ROAD | D | 68.0\% | 81.2\% | c | 32.8\% | 81.0\% | A | 27.8\% | 82.1\% | A | 68.0\% | 79.6\% | c |
| 49 | 13 | 19.42 | 22.865 | 3.445 | GOLD HILL ROAD | COLOMA, JCT. RTE. 153 WEST | D | 59.3\% | 88.6\% | c | 21.9\% | 84.2\% | A | 16.4\% | 84.7\% | A | 58.6\% | 88.0\% | c |
| 49 | 14 | 22.865 | 24.48 | 1.615 | COLOMA, JCT. RTE. 153 WEST | MARSHALL GRADE ROAD (TO GEORGETOWN) | D | 74.8\% | 80.3\% | D | 36.2\% | 80.6\% | A | 28.3\% | 82.5\% | A | 73.9\% | 77.1\% | D |
| 49 | 15 | 24.48 | 28.19 | 3.71 | MARSHALL GRADE ROAD (TO GEORGETOWN) | HASTINGS CREEK BRIDGE | D | 68.5\% | 84.4\% | C | 41.4\% | 82.7\% | B | 27.1\% | 84.1\% | A | 70.0\% | 81.2\% | C |
| 49 | 16 | 28.19 | 34.466 | 6.276 | HASTINGS CREEK BRIDGE | COOL, JCT. RTE. 193 EAST | D | 65.4\% | 88.9\% | C | 32.9\% | 87.0\% | A | 24.2\% | 87.7\% | A | 66.8\% | 86.6\% | c |
| 49 | 17 | 34.466 | 38.233 | 3.767 | COOL, JCT. RTE. 193 EAST | EL DORADO/PLACER COUNTY LINE | F | 85.0\% | 76.2\% | D | 57.2\% | 77.7\% | C | 50.2\% | 79.7\% | B | 85.7\% | 74.9\% | E |
| 50 | 25 | 31.299 | 34.219 | 2.92 | SLY PARK ROAD | OLD CARSON ROAD | E | 61.1\% | 82.1\% | c | 78.0\% | 79.2\% | D | 62.1\% | 83.3\% | C | 55.8\% | 82.2\% | c |
| 50 | 27 | 39.772 | 46.592 | 6.82 | ICEHOUSE ROAD | W O ALDER RIDGE ROAD | F | 64.3\% | 79.4\% | c | 83.7\% | 75.4\% | D | 80.7\% | 77.7\% | D | 68.1\% | 77.0\% | c |
| 50 | 28 | 46.592 | 48.952 | 2.36 | W O ALDER RIDGE ROAD | SILVER FORK ROAD | F | 64.0\% | 79.3\% | C | 83.5\% | 75.9\% | C | 80.5\% | 77.6\% | C | 66.5\% | 77.5\% | C |
| 50 | 29 | 48.952 | 53.732 | 4.78 | SILVER FORK ROAD | WRIGHTS LAKE ROAD | F | 64.4\% | 79.2\% | c | 84.4\% | 75.6\% | D | 81.5\% | 77.3\% | D | 66.8\% | 77.2\% | C |
| 50 | 30 | 53.732 | 57.892 | 4.16 | WRIGHTS LAKE ROAD | STRAWBERRY LN | F | 64.2\% | 79.4\% | C | 84.1\% | 75.9\% | D | 80.7\% | 77.7\% | D | 66.4\% | 77.6\% | C |
| 50 | 31 | 57.892 | 60.192 | 2.3 | STRAWBERRY LN | SLIPPERY FORD ROAD | F | 64.1\% | 79.4\% | C | 83.9\% | 75.8\% | D | 80.5\% | 77.7\% | D | 66.3\% | 77.5\% | c |
| 50 | 32 | 60.192 | 63.522 | 3.33 | SLIPPERY FORD ROAD | SIERRA-AT-TAHOE ROAD | F | 64.3\% | 79.2\% | c | 84.3\% | 75.6\% | D | 81.5\% | 77.2\% | D | 66.8\% | 77.1\% | C |
| 50 | 33 | 63.522 | 65.619 | 1.83 | SIERRA-AT-TAHOE ROAD | ECHO LAKE ROAD | F | 63.9\% | 79.7\% | C | 83.7\% | 76.2\% | D | 80.2\% | 78.1\% | D | 66.1\% | 77.8\% | C |
| 153 | 1 | 0 | 0.12 | 0.12 | JCT. RTE. 49 | COLD SPRINGS ROAD | D | 19.1\% | 87.6\% | A | 58.0\% | 88.3\% | C | 58.3\% | 90.6\% | C | 34.5\% | 86.5\% | A |
| 153 | 2 | 0.12 | 0.55 | 0.43 | COLD SPRINGS ROAD | MARSHALL'S MONUMENT | D | 27.7\% | 94.6\% | A | 27.7\% | 94.6\% | A | 27.7\% | 94.5\% | A | 27.7\% | 94.5\% | A |
| 193 | 1 | 0 | 0.856 | 0.856 | COOL, JCT. RTE. 49 | AMERICAN RIVER ROAD | D | 36.7\% | 85.5\% | A | 71.6\% | 82.5\% | D | 72.4\% | 82.9\% | D | 44.7\% | 84.6\% | B |
| 193 | 2 | 0.856 | 2.169 | 1.313 | AMERICAN RIVER ROAD | AUBURN LAKE TRAIL ROAD | D | 37.8\% | 84.3\% | A | 72.0\% | 80.9\% | D | 73.5\% | 81.1\% | D | 47.6\% | 83.5\% | B |
| 193 | 3 | 2.169 | 12.19 | 10.021 | AUBURN LAKE TRAIL ROAD | EVERGREEN COURT ROAD | D | 40.8\% | 84.6\% | B | 71.3\% | 81.8\% | D | 70.0\% | 81.9\% | C | 49.5\% | 83.7\% | B |
| 193 | 4 | 12.19 | 12.699 | 0.509 | EVERGREEN COURT ROAD | GEORGETOWN, LOWER MAIN STREET | D | 35.5\% | 80.7\% | C | 70.0\% | 76.5\% | c | 70.7\% | 77.7\% | C | 43.7\% | 78.9\% | C |
| 193 | 5 | 12.699 | 16.105 | 3.406 | GEORGETOWN, LOWER MAIN STREET | BLACK OAK MINE ROAD | D | 64.0\% | 89.3\% | C | 30.2\% | 87.1\% | A | 24.3\% | 87.6\% | A | 65.5\% | 87.1\% | C |
| 193 | 6 | 16.105 | 19.4 | 3.295 | BLACK OAK MINE ROAD | GARDEN VALLEY ROAD | D | 52.6\% | 91.9\% | B | 21.8\% | 89.6\% | A | 19.4\% | 90.2\% | A | 52.5\% | 91.6\% | B |
| 193 | 7 | 19.4 | 26.95 | 7.55 | GARDEN VALLEY ROAD | JCT. RTE. 49 | D | 62.0\% | 88.9\% | c | 27.8\% | 87.1\% | A | 24.1\% | 87.3\% | A | 61.2\% | 88.1\% | c |
| Percent of Time Spent Following - average percent of time that one must follow slower vehicles2 Percent of Free-Flow Speed - ability of ones to travel at or near the posted speed limit3 Level of service for two-lane highways is based on criteria in Chapter 15, HCM 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table C-4. Amended General Plan LOS Results for Local Roadways

| ID | Name | Location | Area | $\begin{gathered} \text { Typ } \\ \text { e } \end{gathered}$ |  | 2035 TGPA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | $\begin{gathered} \hline \text { LO } \\ \text { S } \end{gathered}$ | PM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~s} \end{gathered}$ |
| 1 | Bass Lake Rd | North of Country Club Dr | Rural | 2 AU | D | 1430 | D | 1360 | D |
| 2 | Bass Lake Rd | South of Green Valley Rd | Community Region | 2 AU | E | 840 | A-C | 720 | A-C |
| 3 | Bass Lake Rd | North of Serrano Pkwy | Community Region Region | 2 AU | E | 1100 | D | 1080 | D |
| 4 | Bassi Rd | West of Lotus Rd | Rural | 2AU | D | 120 | A-C | 150 | A-C |
| 5 | Bedford Ave | At City Limit | Rural | 2 AU | D | 40 | A-C | 50 | A-C |
| 6 | Broadway | At City Limit | Community Region | 2 AU | E | 350 | A-C | 420 | A-C |
| 7 | Bucks Bar Rd | South Pleasant Valley Rd | Rural | 2AU | D | 470 | A-C | 470 | A-C |
| 8 | Bucks Bar Rd | North of Mt Aukum Rd | Rural | 2AU | D | 350 | A-C | 370 | A-C |
| 9 | Cambridge Rd | North of Country Club Dr | Exception F | 2AU | F | 800 | A-C | 980 | D |
| 10 | Cambridge Rd | South of Country Club Dr | Community Region | 2 AU | E | 780 | A-C | 920 | D |
| 11 | Cambridge Rd | At US 50 Overcrossing | Community Region | 2 AU | E | 1150 | D | 1130 | D |
| 12 | Cambridge Rd | South of Green Valley Rd | Community Region | 2 AU | E | 650 | A-C | 680 | A-C |
| 13 | Cambridge Rd | North of Oxford Rd | Community Region | 2 AU | E | 440 | A-C | 500 | A-C |
| 14 | Cameron Park Dr | North of Coach Ln | Community Region | 4AD | E | 1830 | A-C | 3070 | D |
| 15 | Cameron Park Dr | South of Hacienda Dr | Community Region | 2 AU | E | 1500 | D | 1860 | F |
| 16 | Cameron Park Dr | South of Green Valley Rd | Community Region | 2 AU | E | 860 | D | 970 | D |
| 17 | Cameron Park Dr | North of Mira Loma Dr | $\begin{gathered} \text { Community } \\ \text { Region } \\ \hline \end{gathered}$ | 2 AU | E | 1180 | D | 1480 | D |
| 18 | Cameron Park Dr | South of Robin Ln | Community Region | 2 AU | E | 910 | D | 1370 | D |
| 19 | Cameron Park Dr | North of Robin Ln | Exception F | 2 AU | F | 920 | D | 1420 | D |
| 20 | Carson Rd | East of Barkley Rd | $\begin{gathered} \text { Community } \\ \text { Region } \\ \hline \end{gathered}$ | 2 AU | E | 220 | A-C | 300 | A-C |
| 21 | Carson Rd | At Carson Ct | Rural | 2 AU | D | 90 | A-C | 150 | A-C |
| 22 | Carson Rd | West of Gatlin Rd | Rural | 2AU | D | 70 | A-C | 150 | A-C |
| 23 | Carson Rd | East of Ponderosa Way | Community Region | 2 AU | E | 160 | A-C | 230 | A-C |
| 24 | China Garden Rd | East of Missouri Flat Rd | Community Region | 2 AU | E | 420 | A-C | 580 | A-C |
| 25 | China Garden Rd | North of SR 49 | Community Region | 2 AU | E | 130 | A-C | 130 | A-C |
| 26 | Cold Springs Rd | South of Gold Hill Rd | Rural | 2 AU | D | 220 | A-C | 330 | A-C |
| 27 | Cold Springs Rd | South of SR 153 | Rural | 2 AU | D | 160 | A-C | 230 | A-C |
| 28 | Country Club Dr | East of Bass Lake Rd | Rural | 2 AU | D | 850 | D | 570 | A-C |
| 29 | Country Club Dr | West of Knollwood Dr | Community Region | 2 AU | E | 860 | D | 470 | A-C |
| 30 | Country Club Dr | East of Cambridge Rd | Community Region | 2 AU | E | 600 | A-C | 590 | A-C |
| 31 | Country Club Dr | East of Merrychase Dr | Community Region | 2 AU | E | 530 | A-C | 310 | A-C |
| 32 | Country Club Dr | West of Cameron Park Dr | Community Region | 2 AU | E | 570 | A-C | 790 | A-C |
| 33 | Durock Rd | West of S. Shingle Rd | Community Region | 2 AU | E | 650 | A-C | 870 | D |


| ID | Name | Location | Area | $\begin{gathered} \text { Typ } \\ \text { e } \end{gathered}$ | $\begin{gathered} \text { LOS } \\ \text { Threshol } \\ \text { d } \end{gathered}$ | 2035 TGPA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ | PM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ |
| 34 | El Dorado Hills Blvd | South of Wilson Blvd | Community Region | 4AD | E | 1990 | D | 1900 | D |
| 35 | El Dorado Hills Blvd | North of Wilson Blvd | Community Region | 4AD | E | 2020 | D | 1860 | D |
| 36 | El Dorado Hills Blvd | North of Saratoga Way | Community Region | 4AD | E | 2710 | D | 2620 | D |
| 37 | El Dorado Hills Blvd | South of Francisco Dr | Community Region | 2 AU | E | 1410 | D | 1340 | D |
| 38 | El Dorado Hills Blvd | South of Green Valley Rd | Community Region | 2 AU | E | 450 | A-C | 370 | A-C |
| 39 | El Dorado Hills Blvd | North of Harvard Way | Community Region | 4AD | E | 1760 | A-C | 1580 | A-C |
| 40 | El Dorado Rd | South of US 50 | Community Region | 2 AU | E | 600 | A-C | 660 | A-C |
| 41 | El Dorado Rd | North of Pleasant Valley Rd | Community Region | 2 AU | E | 410 | A-C | 440 | A-C |
| 42 | El Dorado Rd | South of Missouri Flat Rd | Community Region | 2 AU | E | 310 | A-C | 390 | A-C |
| 43 | Enterprise Dr | East of Forni Rd | Community Region | 2AU | E | 290 | A-C | 490 | A-C |
| 44 | Fairplay Rd | South of Mt Aukum Rd | Rural | 2 AU | D | 170 | A-C | 190 | A-C |
| 45 | Forni Rd | North of SR 49 | Community Region | 2 AU | E | 460 | A-C | 480 | A-C |
| 46 | Forni Rd | West of Arroyo Vista Way | Community Region | 2 AU | E | 100 | A-C | 170 | A-C |
| 47 | Francisco Dr | South of Green Valley Rd | Community Region | 2 AU | E | 1100 | D | 1260 | D |
| 48 | French Creek Rd | North of Old French Town Rd | Rural | 2AU | D | 250 | A-C | 230 | A-C |
| 49 | Gold Hill Rd | East of Lotus Road | Rural | 2AU | D | 290 | A-C | 180 | A-C |
| 50 | Gold Hill Rd | East of Cold Springs Rd | Rural | 2AU | D | 80 | A-C | 60 | A-C |
| 51 | Gold Hill Rd | West of Cold Springs Rd | Rural | 2AU | D | 290 | A-C | 180 | A-C |
| 52 | Green Valley Rd | West of Sophia Pkwy | Community Region | 2 AU | E | 2910 | F | 3400 | F |
| 53 | Green Valley Rd | West of Weber Creek | Rural | 2AU | D | 370 | A-C | 510 | A-C |
| 54 | Green Valley Rd | West of Silva Valley Rd | Community Region | 2 AU | E | 1160 | E | 1380 | E |
| 55 | Green Valley Rd | East of Mormon Island Dr | Community Region | 4AD | E | 2580 | C | 3540 | C |
| 56 | Green Valley Rd | West of Mormon Island Dr | Community Region | 4AD | E | 2590 | C | 3540 | C |
| 57 | Green Valley Rd | East of Sophia Pkwy | Community Region | 4AD | E | 2630 | C | 3580 | C |
| 58 | Green Valley Rd | East of Francisco Dr | Community Region | 2 AU | E | 1735 | F | 1715 | F |
| 59 | Green Valley Rd | West of Bass Lake Rd | Community Region | 2 AU | E | 1520 | E | 1140 | E |
| 60 | Green Valley Rd | East of Bass Lake Rd | Community Region | 2 AU | E | 1470 | E | 1330 | D |
| 61 | Green Valley Rd | East of La Crescenta Dr | Community Region | 2 AU | E | 1090 | D | 1000 | E |
| 62 | Green Valley Rd | East of Deer Valley Rd | Rural | 2AU | D | 540 | C | 540 | D |
| 63 | Green Valley Rd | West of Lotus Rd | Rural | 2AU | D | 770 | D | 900 | D |
| 64 | Green Valley Rd | West of Greenstone Rd | Rural | 2AU | D | 430 | A-C | 480 | A-C |
| 65 | Green Valley Rd | West of Missouri Flat Rd | Community Region | 2 AU | E | 950 | D | 850 | D |
| 66 | Green Valley Rd | West of Campus Dr | Rural | 2AU | D | 440 | A-C | 500 | A-C |


| ID | Name | Location | Area | $\begin{gathered} \text { Typ } \\ \text { e } \end{gathered}$ | LOS <br> Threshol d | 2035 TGPA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ | PM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ |
| 67 | Greenstone Rd | North of US 50 | Rural | 2AU | D | 320 | A-C | 320 | A-C |
| 68 | Greenstone Rd | North of Mother Lode Dr | Community Region | 2AU | E | 140 | A-C | 180 | A-C |
| 69 | Grizzly Flat Rd | East of Mt Aukum Rd | Rural | 2AU | D | 200 | A-C | 250 | A-C |
| 70 | Harvard Way | East of El Dorado Hills Blvd | Community Region | 4AU | E | 1250 | A-C | 700 | A-C |
| 71 | Harvard Way | West of Silva Valley Pkwy | Community Region | 4AU | E | 1210 | A-C | 960 | A-C |
| 72 | Ice House Rd | North of US 50 | Rural | 2AU | D | 40 | A-C | 80 | A-C |
| 73 | Latrobe Rd | North of County Line | Rural | 2 AU | D | 480 | A-C | 560 | A-C |
| 74 | Latrobe Rd | South of Investment Blvd | Community Region | 2AU | E | 650 | A-C | 710 | A-C |
| 75 | Latrobe Rd | North of Golden Foothill Pkwy South | Community Region | 4AD | E | 2450 | D | 2640 | D |
| 76 | Latrobe Rd | North of Investment Blvd | Community Region | 2 AU | E | 1180 | D | 1340 | D |
| 77 | Latrobe Rd | North of Golden Foothill Pkwy | Community Region | 4AD | E | 3780 | F | 3840 | F |
| 78 | Latrobe Rd | North of White Rock Rd | Community Region | 6AD | E | 3380 | D | 3540 | D |
| 79 | Lotus Rd | South of Thompson Hill Rd | Rural | 2AU | D | 460 | A-C | 600 | A-C |
| 80 | Lotus Rd | North Green Valley Rd | Rural | 2AU | D | 730 | A-C | 900 | D |
| 81 | Lotus Rd | South of SR 49 | Rural | 2AU | D | 380 | A-C | 520 | A-C |
| 82 | Luneman Rd | West of Lotus Rd | Rural | 2 AU | D | 380 | A-C | 230 | A-C |
| 83 | Marshall Rd | East of SR 49 | Rural | 2AU | D | 380 | A-C | 390 | A-C |
| 84 | Marshall Rd | East of Garden Valley Rd | Rural | 2AU | D | 520 | A-C | 500 | A-C |
| 85 | Marshall Rd | South of Lower Main St | Rural | 2AU | D | 80 | A-C | 110 | A-C |
| 86 | Meder Rd | East of Cameron Park Dr | Community Region | 2AU | E | 850 | D | 1040 | D |
| 87 | Meder Rd | West of Ponderosa Rd | Community Region | 2AU | E | 560 | A-C | 660 | A-C |
| 88 | Missouri Flat Rd | West of El Dorado Rd | Community Region | 2AU | E | 990 | D | 850 | D |
| 89 | Missouri Flat Rd | East of El Dorado Rd | Community Region | 2AU | E | 900 | D | 970 | D |
| 90 | Missouri Flat Rd | South of China Garden Rd | Community Region | 2AU | E | 1180 | D | 1640 | E |
| 91 | Missouri Flat Rd | North of SR 49 | Community Region | 2AU | E | 1050 | D | 1310 | D |
| 92 | Missouri Flat Rd | North of Forni Rd | Exception F | 4AD | F | 2120 | D | 3040 | D |
| 93 | Missouri Flat Rd | South of Forni Rd | Exception F | 4AD | F | 1790 | A-C | 2200 | D |
| 94 | Mormon Emigrant Trl | East of Sly Park Rd | Rural | 2AU | D | 80 | A-C | 110 | A-C |
| 95 | Mosquito Rd | At City Limit | Community Region | 2AU | E | 410 | A-C | 420 | A-C |
| 96 | Mosquito Rd | South of American River Bridge | Rural | 2AU | D | 120 | A-C | 150 | A-C |
| 97 | Mother Lode Dr | East of French Creek Rd | Community Region | 2AU | E | 1090 | D | 1020 | D |
| 98 | Mother Lode Dr | West of Sunset Ln | Community Region | 2AU | E | 1190 | D | 1290 | D |
| 99 | Mother Lode Dr | West of Pleasant Valley Rd | Community Region | 2AU | E | 950 | D | 1120 | D |
| 10 0 | Mother Lode Dr | East of Pleasant Vally Rd | Community Region | 2AU | E | 310 | A-C | 440 | A-C |


| ID | Name | Location | Area | $\begin{gathered} \text { Typ } \\ \text { e } \end{gathered}$ | $\begin{gathered} \text { LOS } \\ \text { Threshol } \\ \text { d } \end{gathered}$ | 2035 TGPA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | $\begin{gathered} \text { LO } \\ \mathrm{S} \end{gathered}$ | PM Volume | $\begin{gathered} \text { LO } \\ \text { S } \end{gathered}$ |
| $\begin{gathered} 10 \\ 1 \end{gathered}$ | Mt Aukum Rd | North of County Line | Rural | 2 AU | D | 130 | A-C | 160 | A-C |
| $\begin{gathered} 10 \\ 2 \end{gathered}$ | Mt Aukum Rd | South of Bucks Bar Rd | Rural | 2 AU | D | 300 | A-C | 360 | A-C |
| $\begin{gathered} 10 \\ 3 \\ \hline \end{gathered}$ | Mt Aukum Rd | South of Pleasant Valley Rd | Rural | 2 AU | D | 250 | A-C | 400 | A-C |
| $\begin{gathered} 10 \\ 4 \\ \hline \end{gathered}$ | Mt Murphy Rd | North of SR 49 | Rural | 2 AU | D | 50 | A-C | 50 | A-C |
| $\begin{gathered} 10 \\ 5 \\ \hline \end{gathered}$ | Mt Murphy Rd | South of Marshall Rd | Rural | 2 AU | D | 70 | A-C | 120 | A-C |
| $\begin{gathered} 10 \\ 6 \\ \hline \end{gathered}$ | N Shingle Rd | South of Green Valley Rd | Rural | 2 AU | D | 500 | A-C | 540 | A-C |
| $\begin{gathered} 10 \\ 7 \\ \hline \end{gathered}$ | Newtown Rd | North of Pioneer Hill Rd | Rural | 2 AU | D | 290 | A-C | 290 | A-C |
| 10 8 | Newtown Rd | East of Broadway Rd | Community Region | 2 AU | E | 360 | A-C | 380 | A-C |
| $\begin{gathered} 10 \\ 9 \\ \hline \end{gathered}$ | Newtown Rd | North of Pleasant Valley Rd | Rural | 2 AU | D | 290 | A-C | 290 | A-C |
| $\begin{gathered} 11 \\ 0 \\ \hline \end{gathered}$ | Old French Town Rd | South of Mother Lode Dr | Community Region | 2 AU | E | 150 | A-C | 180 | A-C |
| $\begin{gathered} 11 \\ 1 \\ \hline \end{gathered}$ | Omo Ranch Rd | East of Mt Aukum Rd | Rural | 2 AU | D | 70 | A-C | 70 | A-C |
| 11 <br> 2 | Oxford Rd | East of Salida Way | Community Region | 2 AU | E | 550 | A-C | 690 | A-C |
| $\begin{gathered} 11 \\ 3 \\ \hline \end{gathered}$ | Palmer Dr | East of Cameron Park Dr | Community Region | 2 AU | E | 670 | A-C | 1200 | D |
| $\begin{gathered} 11 \\ 4 \\ \hline \end{gathered}$ | Patterson Dr | South of Pleasant Valley Rd | Community Region | 2 AU | E | 430 | A-C | 580 | A-C |
| $\begin{gathered} 11 \\ 5 \\ \hline \end{gathered}$ | Pleasant Valley Rd | East of Mother Lode Dr | Community Region | 2 AU | E | 820 | A-C | 920 | D |
| $\begin{gathered} 11 \\ 6 \\ \hline \end{gathered}$ | Pleasant Valley Rd | East of Bucks Bar Rd | Community Region | 2 AU | E | 550 | A-C | 530 | A-C |
| $\begin{gathered} 11 \\ 7 \\ \hline \end{gathered}$ | Pleasant Valley Rd | West of Oak Hill Rd | Community Region | 2 AU | E | 970 | D | 1050 | D |
| $\begin{gathered} 11 \\ 8 \\ \hline \end{gathered}$ | Pleasant Valley Rd | East of SR 49 | Community Region | 2 AU | E | 1230 | D | 1410 | D |
| $\begin{gathered} 11 \\ 9 \\ \hline \end{gathered}$ | Pleasant Valley Rd | East of Cedar Ravine Rd | Community Region | 2 AU | E | 990 | D | 1000 | D |
| $\begin{gathered} 12 \\ 0 \\ \hline \end{gathered}$ | Pleasant Valley Rd | East of Newtown Rd | Community Region | 2AU | E | 520 | A-C | 550 | A-C |
| $\begin{gathered} 12 \\ 1 \\ \hline \end{gathered}$ | Ponderosa Rd | North of Jackpine Rd | Rural | 2 AU | D | 160 | A-C | 140 | A-C |
| $\begin{gathered} 12 \\ 2 \\ \hline \end{gathered}$ | Pony Express Trl | East of Carson Rd | Community Region | 2 AU | E | 240 | A-C | 300 | A-C |
| $\begin{gathered} 12 \\ 3 \\ \hline \end{gathered}$ | Pony Express Trl | East of Gilmore Rd | Community Region | 2 AU | E | 300 | A-C | 500 | A-C |
| 12 <br> 4 | Pony Express Trl | West of Forebay Rd | Community Region | 2 AU | E | 310 | A-C | 580 | A-C |
| 12 5 | Rock Creek Rd | East of SR 193 | Rural | 2 AU | D | 30 | A-C | 30 | A-C |
| 12 <br> 6 <br> 12 | Salmon Falls Rd | At New York Creek Bridge | Rural | 2 AU | D | 280 | A-C | 320 | A-C |
| 12 <br> 7 | Salmon Falls Rd | South of Malcolm Dixon Rd | Community Region | 2 AU | E | 760 | A-C | 700 | A-C |
| 12 <br> 8 <br> 12 | Salmon Falls Rd | South of Pedro Hill Rd | Rural | 2 AU | D | 170 | A-C | 160 | A-C |
| 12 9 | Salmon Falls Rd | South of Rattlesnake Bar Rd | Rural | 2 AU | D | 50 | A-C | 90 | A-C |
| 13 <br> 0 <br> 1 | Serrano Pkwy | East of Silva Valley Pkwy | Community Region | 4AD | E | 2050 | D | 1370 | A-C |
| 13 1 | Serrano Pkwy | West of Bass Lake Rd | Community Region | 2AU | E | 910 | D | 850 | D |


| ID | Name | Location | Area | $\begin{gathered} \text { Typ } \\ \text { e } \end{gathered}$ | LOS <br> Threshol d | 2035 TGPA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | AM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ | PM Volume | $\begin{gathered} \mathrm{LO} \\ \mathrm{~S} \end{gathered}$ |
| 13 <br> 2 | Shingle Springs Dr | South of US 50 | Rural | 2 AU | D | 1020 | D | 650 | A-C |
| 13 <br> 3 | Silva Valley Pky | North of US 50 | Community Region | 4AD | E | 2160 | D | 2540 | D |
| 13 <br> 4 | Silva Valley Pky | South of Green Valley Rd | Community Region | 2 AU | E | 770 | A-C | 690 | A-C |
| $\begin{gathered} 13 \\ 5 \\ \hline \end{gathered}$ | Silva Valley Pky | North of Havard Way | Community Region | 2 AU | E | 1210 | D | 1120 | D |
| 13 <br> 6 | Silva Valley Pky | South of Serrano Pkwy | Community Region | 4AD | E | 1870 | D | 1760 | A-C |
| 13 <br> 7 | Sly Park Rd | East of Mt Aukum Rd | Rural | 2 AU | D | 290 | A-C | 320 | A-C |
| 13 <br> 8 | Sly Park Rd | East of Mormon Emigrant Trail | Rural | 2 AU | D | 310 | A-C | 410 | A-C |
| 13 <br> 9 | Sly Park Rd | South of Pony Express Trail | Community Region | 2 AU | E | 670 | A-C | 840 | A-C |
| 14 <br> 0 | Snows Rd | North of Newtown Rd | Rural | 2 AU | D | 100 | A-C | 110 | A-C |
| $\begin{gathered} 14 \\ 1 \\ \hline \end{gathered}$ | Snows Rd | South of Carson Rd | Community Region | 2 AU | E | 370 | A-C | 240 | A-C |
| $\begin{gathered} 14 \\ 2 \\ \hline \end{gathered}$ | South Shingle Rd | East of Latrobe Rd | Rural | 2AU | D | 140 | A-C | 130 | A-C |
| 14 <br> 3 <br> 1 | South Shingle Rd | North of Barnett Ranch | Rural | 2 AU | D | 240 | A-C | 280 | A-C |
| $\begin{gathered} 14 \\ 4 \\ \hline \end{gathered}$ | South Shingle Rd | South of Sunset Ln | Community Region | 2 AU | E | 590 | A-C | 830 | A-C |
| $\begin{gathered} 14 \\ 5 \\ \hline \end{gathered}$ | Starbuck Rd | North of Green Valley Rd | Community Region | 2 AU | E | 170 | A-C | 210 | A-C |
| $\begin{gathered} 14 \\ 6 \\ \hline \end{gathered}$ | Union Ridge Rd | West of Hassler Rd | Rural | 2 AU | D | 40 | A-C | 50 | A-C |
| $\begin{gathered} 14 \\ 7 \\ \hline \end{gathered}$ | Wentworth Springs Rd | West of Quintette Rd | Rural | 2 AU | D | 50 | A-C | 70 | A-C |
| $\begin{gathered} 14 \\ 8 \\ \hline \end{gathered}$ | White Rock Rd | West of Windfield Way | Community Region | 2AU | E | 1440 | D | 1900 | F |
| $\begin{gathered} 14 \\ 9 \\ \hline \end{gathered}$ | White Rock Rd | At County Line | Community Region | 2 AU | E | 1560 | E | 2230 | F |
| $\begin{gathered} 15 \\ 0 \\ \hline \end{gathered}$ | White Rock Rd | East of Latrobe Rd | Community Region | 2 AU | E | 1180 | D | 1650 | F |
| $\begin{gathered} 15 \\ 1 \\ \hline \end{gathered}$ | White Rock Rd | West of Latrobe Rd | Community Region | 4AD | E | 1500 | A-C | 2110 | D |

## ATTACHMENT D

## INTERCHANGE VOLUME COMPARISON

(all segments presented from west to east)

Table D-1. Interchange Volume Comparison between the Previous and the Current Models - 2035 Amended GP

| Interchange | Previous Model - GP PM Peak |  |  |  |  |  |  |  | Current Model - GP PM Peak |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ramps |  |  |  |  | Overpass |  |  | Ramps |  |  |  |  | Overpass |  |  |
|  | EB OFF | EBON | WB OfF | WB ON | Tot_Ramps | NB | SB | Total Ovrpas | EB OFF | EB ON | WB OFF | WBon | Tot_Ramps | NB | SB | Total Ovrpas |
| El Dorado Hills Blva | 1368 | 1073 | 1086 | 941 | 4468 | 2678 | 2262 | 4940 | 1614 | 782 | 490 | 1714 | 4600 | 3117 | 1216 | 4333 |
| Silva Valley Pkwy | 1252 | 1531 | 1469 | 694 | 4946 | 1613 | 1856 | 3469 | 989 | 689 | 533 | 428 | 2639 | 1276 | 688 | 1964 |
| Bass Lake Rd | 897 | 376 | 506 | 670 | 2449 | 878 | 427 | 1305 | 859 | 244 | 405 | 475 | 1983 | 834 | 366 | 1200 |
| Cambridge Rd | 892 | 154 | 152 | 586 | 1784 | 873 | 190 | 1063 | 812 | 84 | 174 | 650 | 1720 | 767 | 169 | 936 |
| Cameron Park Dr | 1523 | 454 | 797 | 1228 | 4002 | 1961 | 849 | 2810 | 949 | 747 | 629 | 1010 | 3335 | 1906 | 1242 | 3148 |
| Ponderosa Rd | 1075 | 640 | 735 | 874 | 3324 | 1266 | 826 | 2092 | 1219 | 348 | 304 | 887 | 2758 | 1447 | 700 | 2147 |
| Shingle Springs Dr | 222 | 123 | 111 | 211 | 667 | 211 | 111 | 322 | 228 | 119 | 143 | 149 | 639 | 205 | 143 | 348 |
| Red Hawk Pkwy | 326 | 139 | 52 | 410 | 927 | 326 | 139 | 465 | 140 | 144 | 99 | 153 | 536 | 239 | 297 | 536 |
| Greenstone Rd | 219 | 81 | 126 | 237 | 663 | 299 | 144 | 443 | 179 | 61 | 87 | 258 | 585 | 373 | 149 | 522 |
| El Dorado Rd | 205 | 342 | 305 | 187 | 1039 | 265 | 425 | 690 | 229 | 194 | 224 | 208 | 855 | 301 | 352 | 653 |
| Missouri Flat Rd | 932 | 931 | 817 | 996 | 3676 | 1498 | 1318 | 2816 | 728 | 731 | 686 | 564 | 2709 | 958 | 1160 | 2118 |
| Placerville Dr (West) | 875 | 332 | 222 | 887 | 2316 | 1061 | 534 | 1595 | 631 | 107 | 0 | 740 | 1478 | 727 | 79 | 806 |
| Schnell School Rd | 2 | 257 | 193 | 1 | 453 | 1061 | 534 | 1595 | 121 | 156 | 38 | 263 | 578 | 252 | 75 | 327 |
| View Point Dr | 431 | 88 | 61 | 282 | 862 | 306 | 102 | 408 | 339 | 18 | 3 | 211 | 571 | 232 | 11 | 243 |
| Smith Flat Rd |  | 9 | 61 |  | 70 | 12 | 30 | 42 |  | 46 | 48 |  | 94 | 0 | 48 | 48 |
| Ridgeway Dr | 2 | 0 | 273 | 214 | 489 | 0 | 10 | 10 | 288 | 16 | 16 | 157 | 477 | 293 | 22 | 315 |
| Sly Park Rd | 273 | 214 | 165 | 98 | 750 | 174 | 200 | 374 | 454 | 46 | 54 | 209 | 763 | 398 | 272 | 670 |
|  |  |  |  | Approaches to the Interchanges |  |  |  |  |  |  |  | Approaches to the Interchanges |  |  |  |  |
|  |  |  |  | North_NB | North_SB | South_NB | South_SB | Total Approaches |  |  |  | North_NB | North_SB | South_NB | South_SB | Total Approaches |
| Ray Lawer Dr | Not an interchange in the previous model |  |  | N/A | N/A | N/A | N/A | N/A |  |  |  | 311 | 317 | 295 | 25 | 948 |
| Placerville Dr (East) |  |  |  | 496 | 547 |  |  | 1043 |  |  |  | 167 | 319 |  |  | 486 |
| Mosquito Rd |  |  |  | 378 | 272 | 693 | 676 | 2019 |  |  |  | 409 | 333 | 380 | 434 | 1556 |
| Carson Rd |  |  |  | 152 | 121 |  |  | 273 |  |  |  | 39 | 48 |  |  | 87 |
|  | shows locations where TIM fee CIP project was identified indicates where the current model is greater than the previous model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table D-2. Interchange Volume Comparison between the Previous and the Current Models - 2035 Amended GP

| Interchange | Previous Model - GP PM Peak |  |  |  |  |  |  |  | Current Model - GP PM Peak |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ramps |  |  |  |  | Overpass |  |  | Ramps |  |  |  |  | Overpass |  |  |
|  | EB OFF | EBON | WB OfF | WBON | Tot_Ramps | NB | SB | Total Ovrpas | EB OFF | EB ON | WB OFF | WBON | Tot_Ramps | NB | SB | Total Ourpas |
| El Dorado Hills Blvd | 3\% | 0\% | 0\% | 4\% | 2\% | 4\% | 3\% | 3\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Silva Valley Pkwy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bass Lake Rd | 2\% | 8\% | 7\% | 4\% | 4\% | 2\% | 8\% | 3\% | 1\% | 4\% | 3\% | 3\% | 2\% | 1\% | 5\% | 2\% |
| Cambridge Rd | 3\% | 3\% | 1\% | 2\% | 2\% | 3\% | 3\% | 3\% | 3\% | -1\% | 0\% | 3\% | 2\% | 2\% | 1\% | 2\% |
| Cameron Park Dr | 3\% | -1\% | 1\% | 3\% | 2\% | 3\% | 0\% | 2\% | 2\% | 1\% | 1\% | 3\% | 2\% | 2\% | 1\% | 2\% |
| Ponderosa Rd | 1\% | 1\% | 2\% | 1\% | 1\% | 2\% | 2\% | 2\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% |
| Shingle Springs Dr | 5\% | 3\% | 3\% | 5\% | 4\% | 5\% | 3\% | 4\% | 6\% | 3\% | 2\% | 7\% | 4\% | 5\% | 3\% | 4\% |
| Red Hawk Pkwy |  |  |  |  |  |  |  |  | 0\% | 0\% | 0\% | 1\% | 0\% | 0\% | 0\% | 0\% |
| Greenstone Rd | 3\% | 0\% | 2\% | 3\% | 2\% | 3\% | 1\% | 2\% | 0\% | 3\% | 1\% | 4\% | 2\% | 3\% | 3\% | 3\% |
| El Dorado Rd | 2\% | 4\% | 1\% | 4\% | 2\% | 3\% | 2\% | 2\% | 3\% | 1\% | 3\% | 2\% | 2\% | 3\% | 3\% | 3\% |
| Missouri Flat Rd | 2\% | 0\% | 0\% | 2\% | 1\% | 3\% | 2\% | 2\% | 1\% | 0\% | 0\% | 1\% | 1\% | 1\% | 0\% | 1\% |
| Placerville Dr (West) | 1\% | -1\% | -1\% | 0\% | 0\% | 1\% | 0\% | 1\% | 1\% | 0\% | -100\% | 1\% | 0\% | 1\% | -3\% | 0\% |
| Schnell School Rd | -10\% | -2\% | 1\% |  | -1\% |  | 3\% | 7\% | 6\% | 0\% | 0\% | 1\% | 1\% | 1\% | 0\% | 1\% |
| View Point Dr | 1\% | 2\% | 3\% | 2\% | 2\% | 1\% | 4\% | 2\% | 1\% | 0\% | 2\% | 2\% | 1\% | 2\% | 1\% | 2\% |
| Smith Flat Rd |  | -1\% | 7\% |  | 5\% | 3\% | 2\% | 3\% |  | 2\% | 1\% |  | 2\% |  | 1\% | 1\% |
| Ridgeway Dr |  |  | 1\% | 1\% | 1\% |  | 1\% | 1\% | 1\% | 1\% | 0\% | 1\% | 1\% | 0\% | 0\% | 0\% |
| Sly Park Rd | 3\% | -1\% | 0\% | 0\% | 1\% | 0\% | 1\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 1\% |
|  |  |  |  | Approaches to the Interchanges |  |  |  |  |  |  |  | Approaches to the Interchanges |  |  |  |  |
|  |  |  |  | North_NB | North_SB | South_NB | South_SB | Total Approaches |  |  |  | North_NB | North_SB | South_NB | South_SB | Total Approaches |
| Ray Lawer Dr | Not an interchange in the previous model |  |  | N/A | N/A | N/A | N/A | N/A |  |  |  |  |  |  |  |  |
| Placerville Dr (East) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mosquito Rd |  |  |  | 1\% | 1\% | 1\% | 1\% | 1\% |  |  |  | 1\% | 2\% | 1\% | 1\% | 1\% |
| Carson Rd |  |  |  | 0\% | 0\% |  |  | 0\% |  |  |  | 2\% | 4\% |  |  | 3\% |
|  | shows locations where TIM fee CIP project was identified indicates where the current model is greater than the previous model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## ATTACHMENT E

## INTERCHANGE OPERATIONAL ANALYSIS

US 50 Bass Lake Road Interchange
US 50 Missouri Flat Road Interchange US 50 Cameron Park Drive Interchange

Kittelson \& Associates, inc.
TRANSPORTATIONENGINEERING/PLANNING
428 J Street, Suite 500, Sacramento, CA 95814 P916.266.2190 F 916.266.2195

## MEMORANDUM

| Date: | March 31, 2016 |
| :--- | :--- |
| To: |  |
|  |  |
|  | Claudia Wade |
|  | 2850 Fairlane Court, Building C |
|  | Placerville, CA 95667 |
|  |  |
| From: | Chirag Safi |
| Project: | CIP \& TIM Fee Update: Western Slope |
| Subject: | Attachment Material for Draft Technical Memorandum 2-3: Bass Lake Road Interchange |

This memorandum summarizes the existing and future deficiency analysis at the Bass Lake Road interchange with US 50, including the Mitigation Fee Act (MFA) nexus justification for the improvement concepts to be advanced as part of the Major Capital Improvement Program (CIP) \& Traffic Impact Mitigation (TIM) Fee Update. The analysis includes results for both existing conditions and the County adopted Amended General Plan (GP).

## ANALYSIS METHODOLOGY

The existing and future deficiency analysis at two ramp intersections was performed based on the tools, methodologies and assumptions described in the Draft Technical Memorandum 2-1: Analysis Methodology.

## LEVEL OF SERVICE STANDARDS

The following criteria are established to determine whether the vehicular traffic on a roadway facility exceeds the standard operating conditions.

## County Roadways

Circulation Policy TC-Xd of the El Dorado County General Plan provides level of service standards for County-maintained roads and state highways as follows:

Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume
to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table.

Roadways in the community regions are evaluated against LOS E standard, while those in the rural regions and rural centers were analyzed against LOS D.

## State Facilities

County's Policy TC-Xd is applicable not only to the County roadways, but also to the state facilities. As such, traffic conditions for state facilities within the unincorporated areas of the County shall not be worse than LOS E in the community regions and LOS D in the rural center and rural regions, with except to the locations specified in Table TC-2.

Bass Lake Road eastbound and westbound US 50 ramp intersections are located in the rural regions, and therefore, the analysis was performed using LOS D threshold which is consistent with Caltrans criteria in the Transportation Concept Report and Corridor System Management Plan.

## EXISTING DEFICIENCY ANALYSIS

Existing AM and PM peak period turning movement counts collected in January 2014 were used to conduct existing deficiency analysis. All counts were collected on a Tuesday, Wednesday or Thursday during the week of January $26^{\text {th }}$ when schools were in session. In order to better reflect existing demand, the turning movement counts at ramp intersections were balanced upwardly. Table 1 shows level of service and delays results for the existing conditions. The eastbound ramp intersection is registered to exceed the County's LOS threshold (LOS D). Appendix A provides the analysis worksheets.

Table 1. Existing (2014) Conditions Level of Service

| Intersection | Control | AM |  | PM |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | LOS | Delay | LOS | Delay |
| Bass Lake Road/Westbound <br> Ramp | SSSC | B |  |  |  |

## FUTURE DEFICIENCY ANALYSIS

Cumulative conditions deficiency analysis utilizes the existing lane configuration and traffic volumes derived from County's travel demand model. As documented in Draft Technical Memorandum 2-3: Existing and Future Deficiency Analysis, the future forecasts represent the approved allocation of growth in the County's General Plan. Prior to analysis, post processing adjustments (Furness Method) were performed on the travel forecasts based on the NCHRP Report 255 to yield the future year turn movement volumes.

Table 2 shows level of service and delays results for the 2035 cumulative conditions with existing lane configuration and traffic controls. Both ramp intersections were projected to exceed County's level of service threshold during AM and/or PM peak hours. The $95^{\text {th }}$ percentile vehicular queues were estimated to exceed the available storage on the off-ramps. Appendix B provides the analysis worksheets.

Table 2. Cumulative (2035) Conditions Level of Service with Existing Configuration

| Intersection | Control | AM |  | PM |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | LOS | Delay | LOS | Delay |
| Bass Lake Road/Westbound <br> Ramp | SSSC | C |  |  |  |

The following improvements would be needed to meet the County's operational threshold:

## Bass Lake Road and Westbound Ramps

- Add a traffic signal
- Install a southbound right-turn lane for the westbound on-ramp movement
- Install second northbound through lane


## Bass Lake Road and Eastbound Ramps

- Add a traffic signal
- Install an eastbound left-turn lane on the off-ramp approach with 400 feet storage and provide its receiving lane

With above improvements, both ramp intersections are anticipated to operate within acceptable level of service and queues. Replacement of the US 50 bridge structure will not be required to implement these improvements.

## CONCLUSION

Completion of the existing and future deficiency analysis will inform the identification of CIP projects to be funded through the updated TIM Fee program.

The westbound US 50 ramp intersection with Bass Lake Road currently operates within level of service standards. It is projected to function at LOS F in the cumulative conditions, exceeding County's threshold. Therefore, this location is eligible for the CIP project which can be funded through TIM fees.

The eastbound US 50 ramp intersection with Bass Lake Road currently operates at LOS E during the PM peak hour, exceeding County's threshold. Level of service and queues will exacerbate at this location under the cumulative conditions. Therefore, this location is eligible for the CIP project which can be funded through TIM fees.

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## MEMORANDUM

| Date: | March 31, 2016 |
| :--- | :--- |
| To: |  |
|  | Claudia Wade |
|  | County of El Dorado |
|  | 2850 Fairlane Court, Building C |
|  | Placerville, CA 95667 |
| From: | Chirag Safi |
| Project: | CIP \& TIM Fee Update: Western Slope |
| Subject: | Attachment Material for Draft Technical Memorandum 2-3: Cameron Park Drive |
|  | Interchange |

This memorandum summarizes the existing deficiency analysis at the Cameron Park Drive interchange with US 50, including the Mitigation Fee Act (MFA) nexus justification for the improvement concepts to be advanced as part of the Major Capital Improvement Program (CIP) \& Traffic Impact Mitigation (TIM) Fee Update.

Two intersections were included in analysis, as listed below.

1. Cameron Park Drive and Country Club Drive/US 50 Westbound Ramps
2. Cameron Park Drive and US 50 Eastbound Ramps

## ANALYSIS METHODOLOGY

The existing deficiency analysis at the study intersections was performed based on the tools, methodologies and assumptions described in the Technical Memorandum 2-1: Analysis Methodology. Synchro models were used to report operational results.

## LEVEL OF SERVICE STANDARDS

The following criteria are established to determine whether the vehicular traffic on a roadway facility exceeds the standard operating conditions.

## County Roadways

Circulation Policy TC-Xd of the El Dorado County General Plan provides level of service standards for County-maintained roads and state highways as follows:

Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table.

Roadways in the community regions are evaluated against LOS E standard, while those in the rural regions and rural centers were analyzed against LOS D.

## State Facilities

County's Policy TC-Xd is applicable not only to the County roadways, but also to the state facilities. As such, traffic conditions for state facilities within the unincorporated areas of the County shall not be worse than LOS E in the community regions and LOS D in the rural center and rural regions, with except to the locations specified in Table TC-2.

The two study intersections listed earlier are located in the community area, and therefore, the analysis was performed using LOS E threshold which is consistent with Caltrans criteria in the Transportation Concept Report and Corridor System Management Plan.

## EXISTING DEFICIENCY ANALYSIS

Existing AM and PM peak period turning movement counts collected in March 2016 were used to conduct existing deficiency analysis. All counts were collected on Wednesday, March 3, 2016. The schools were in session and weather was dry. In order to better reflect existing demand, the turning movement counts at ramp intersections were balanced upwardly. Table 1 shows level of service and delay results for the existing conditions. Appendix A provides the analysis worksheets.

Table 1. Existing (2016) Conditions Level of Service

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection | Control | LOS | Delay | LOS | Delay |
| Cameron Park Drive/Country Club Drive/US 50 Westbound Ramps | Signal | C | 33.5 | C | 25.8 |
| Cameron Park Drive/US 50 Eastbound Ramps | Signal | B | 16.2 | C | 27.7 |
| Source: Kittelson \& Associates, 2016 |  |  |  |  |  |

The study intersections currently operate within the County's and Caltrans operational threshold. The $95^{\text {th }}$ percentile queues on the off-ramp approaches are accommodated within the available storage.

## CONCLUSION

Completion of the existing and future deficiency analysis will inform the identification of CIP projects to be funded through the updated TIM Fee program. None of the study intersections reported an existing deficiency. Therefore, this interchange is considered an eligible CIP project which can be funded through TIM fees.

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## MEMORANDUM

| Date: | March 31, 2016 |
| :--- | :--- |
|  |  |
| To: | Claudia Wade |
|  | County of El Dorado |
|  | 2850 Fairlane Court, Building C |
|  | Placerville, CA 95667 |
| From: | Chirag Safi |
| Project: | CIP \& TIM Fee Update: Western Slope |
| Subject: |  |
|  | Attachment Material for Draft Technical Memorandum 2-3: Missouri Flat Road <br>  <br> $\quad$Interchange |

This memorandum summarizes the existing and future deficiency analysis at the Missouri Flat Road interchange with US 50, including the Mitigation Fee Act (MFA) nexus justification for the improvement concepts to be advanced as part of the Major Capital Improvement Program (CIP) \& Traffic Impact Mitigation (TIM) Fee Update. The analysis includes results for both existing conditions and the County adopted Amended General Plan (GP).

Due to close proximity with the adjacent intersections, two additional intersections were included in analysis. As such, the following intersections were analyzed:

1. Missouri Flat Road and Plaza Drive
2. Missouri Flat Road and US 50 Westbound Ramps
3. Missouri Flat Road and US 50 Eastbound Ramps
4. Missouri Flat Road and Mother Lode Drive

## ANALYSIS METHODOLOGY

The existing and future deficiency analysis at the study intersections was performed based on the tools, methodologies and assumptions described in the Draft Technical Memorandum 2-1: Analysis Methodology. SimTraffic simulation models were used to report operational results. The simulation models were calibrated to field observations for another project (Diamond Springs Parkway). The models and associated results should be considered preliminary at this point and will be further refined in the ongoing Missouri Flat Circulation and Financing Plan Phase II (MC\&FP-II) study.

## LEVEL OF SERVICE STANDARDS

The following criteria are established to determine whether the vehicular traffic on a roadway facility exceeds the standard operating conditions.

## County Roadways

Circulation Policy TC-Xd of the El Dorado County General Plan provides level of service standards for County-maintained roads and state highways as follows:

Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table.

Roadways in the community regions are evaluated against LOS E standard, while those in the rural regions and rural centers were analyzed against LOS D.

## State Facilities

County's Policy TC-Xd is applicable not only to the County roadways, but also to the state facilities. As such, traffic conditions for state facilities within the unincorporated areas of the County shall not be worse than LOS E in the community regions and LOS D in the rural center and rural regions, with except to the locations specified in Table TC-2.

The four study intersections listed earlier are located in the community area, and therefore, the analysis was performed using LOS E threshold which is consistent with Caltrans criteria in the Transportation Concept Report and Corridor System Management Plan.

## EXISTING DEFICIENCY ANALYSIS

Existing AM and PM peak period turning movement counts collected in May 2015 were used to conduct existing deficiency analysis. All counts were collected on a Tuesday, Wednesday or Thursday during the week of May $4^{\text {th }}$ when schools were in session. In order to better reflect existing demand, the turning movement counts at ramp intersections were balanced upwardly. Table 1 shows level of service and delays results for the existing conditions. The results denote an average of ten simulation runs. Appendix A provides the analysis worksheets.

Table 1. Existing (2014) Conditions Level of Service

| Intersection | Control | AM |  | PM |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LOS | Delay | LOS | Delay |
| Missouri Flat Road/Plaza Drive | Signal | B | 16.6 | C | 27 |
| Missouri Flat Road/Westbound Ramps | Signal | C | 23.2 | C | 24.3 |
| Missouri Flat Road/Eastbound Ramps | Signal | B | 19.5 | C | 29.3 |
| Missouri Flat Road/Mother Lode Drive | Signal | A | 8.3 | B | 10.8 |
| Note: <br> Source: Kittelson \& Associates, 2015 |  |  |  |  |  |

The study intersections operate within County's operational threshold. The $95^{\text {th }}$ percentile queues on the off-ramp approaches are accommodated within the available storage.

## FUTURE DEFICIENCY ANALYSIS

Cumulative conditions deficiency analysis utilizes the existing lane configuration and traffic volumes derived from County's travel demand model. As documented in Draft Technical Memorandum 2-3: Existing and Future Deficiency Analysis, the future forecasts represent the approved allocation of growth in the County's General Plan. Prior to analysis, post processing adjustments (Furness Method) were performed on the travel forecasts based on the NCHRP Report 255 to yield the future year turn movement volumes. The signal timings were optimized to better adapt to the future demand and travel patterns.

Table 2 shows level of service and delays results for the 2035 cumulative conditions with existing lane configuration and traffic controls. The results denote an average of ten simulation runs. Appendix B provides the analysis worksheets.

The study intersections were projected to operate within County's level of service threshold during AM and PM peak hours. The $95^{\text {th }}$ percentile queues on the off-ramp approaches are accommodated within the available storage. However, the $95^{\text {th }}$ percentile vehicular queues were estimated to exceed the available storage for a number of movements at the study intersections, including the southbound approach at Missouri Flat Road/Plaza Drive and the eastbound approach at Missouri Flat Road/Mother Lode Drive. The queues could further degrade overall operations near the interchange, potentially affecting the off-ramp approaches.

Table 2. Cumulative (2035) Conditions Level of Service with Existing Configuration

| Intersection | Control | AM |  | PM |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Delay | LOS | Delay |  |
| Missouri Flat Road/Plaza Drive | Signal | B | 14.3 | D | 54.3 |
| Missouri Flat Road/Westbound Ramps | Signal | B | 14.3 | C | 29.9 |
| Missouri Flat Road/Eastbound Ramps | Signal | B | 12.7 | C | 31.6 |
| Missouri Flat Road/Mother Lode Drive | Signal | A | 8.4 | C | 30.9 |
| Note: <br> Source: Kittelson \& Associates, 2015 |  |  |  |  |  |

## CONCLUSION

Completion of the existing and future deficiency analysis will inform the identification of CIP projects to be funded through the updated TIM Fee program.

None of the study intersections reported an existing deficiency. The study intersections would operate at an acceptable level of service under the cumulative conditions, meeting the County's operational standard. However, the existing non-standard spacing between the eastbound ramp and Mother Lode Drive is considered as a design deficiency. Therefore, this location is should be considered an eligible CIP project which cannot be funded through TIM fees. The County should continue to monitor these intersections and, if necessary, work with Caltrans to adjust the signal timings along the corridor to minimize delays and queues.

This interchange will be further evaluated in the MC\&FP-II study with refined land use assumptions and roadway network in travel demand model and simulation models.

## ATTACHMENT F

## GRAPHICS FOR FAIR SHARE ANALYSIS RESULTS

## Capital Improvement Program Projects Funding Allocation by Zone Geography

| A-1 | US 50 Auxiliary Lane <br> Eastbound from Sacramento <br> County to El Dorado Hills <br> Boulevard | 50.00\% External <br> 63.89\% |
| :---: | :---: | :---: |
| A-2 | US 50 Auxiliary Lane <br> Eastbound from Bass Lake <br> Road to Cambridge Road | 25.13\% External <br> 68.55\% |
| A-3 | US 50 Auxiliary Lane <br> Eastbound from Cambridge <br> Road to Cameron Park Drive | 34.11\% External |
| A-4 | US 50 Auxiliary Lane <br> Eastbound from Cameron Park <br> Drive to Ponderosa Road | 32.11\% External |
| A-5 | US 50 Auxiliary Lane <br> Westbound from Ponderosa <br> Road to Cameron Park Drive | 32.11\% External |
| A-6 | US 50 Auxiliary Lane <br> Westbound from Cambridge Road to Bass Lake Road | 25.13\% External |
| A-7 | US 50 Auxiliary Lane <br> Westbound from Cambridge Road to Bass Lake Road |  |

## Capital Improvement Program Projects Funding Allocation by Zone Geography

| A-8 | US 50 Auxiliary Lane <br> Westbound from El Dorado Hills Boulevard to Sacramento County |  |
| :---: | :---: | :---: |
| I-1 | US 50 Interchange Improvement <br> Cameron Park Drive |  |
| I-2 | US 50 Interchange Improvement <br> El Dorado Hills Boulevard |  |
| 1-3 | US 50 Interchange Improvement <br> El Dorado Road | 15.66\% External <br> 0.32\% |
| 1-4 | US 50 Interchange Improvement <br> Ponderosa Road |  |
| 1-5 | US 50 Interchange Improvement <br> Bass Lake Road |  |
| 1-6 | US 50 Interchange Improvement <br> Cambridge Road |  |

## Capital Improvement Program Projects Funding Allocation by Zone Geography

| 1-7 | US 50 Interchange Improvement <br> Silva Valley Parkway (Phase II) |  |
| :---: | :---: | :---: |
| R-1 | Roadway Improvements <br> Cameron Park Drive from Palmer Drive to Hacienda Road Road |  |
| R-2 | Roadway Improvements Green Valley Road from Sacramento County to Sophia Parkway |  |
| R-3 | Roadway Improvements <br> Green Valley Road fromFrancisco Drive to Siliva Valley <br> Parkway |  |
| R-4 | Roadway Improvements <br> Green Valley Road from Deer Valley Road to Lotus Road |  |
| R-5 | Roadway Improvements White Rock Road from Post Street to Silva Valley Road |  |
| R-6 | Roadway Improvements <br> Saratoga Way from Sacramento County to E Dorado Hills Boulevard |  |
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## Capital Improvement Program Projects Funding Allocation by Zone Geography




[^0]:    ${ }^{1}$ Caltrans High-Occupancy Vehicle Guidelines, Caltrans 2003.

[^1]:    ${ }^{3}$ For a description of the NCHRP 255 adjustments process - see subsequent Roadway Segment Volume discussion.

[^2]:    ${ }^{4}$ Eastbound deficiency based on the Caltrans capacity designation of 2 General Purpose Lanes, 1 HOV Lane, and 1 Auxiliary Lane.
    ${ }^{5}$ This deficiency only applies to the two-lane portion of this segment.

[^3]:    ${ }^{6}$ This improvement only applies to the two-lane portions of this segment.

[^4]:    ${ }^{7}$ Seven TIM Fee CIP projects have been completed in TIM Fee Zone 8 with outstanding reimbursement agreement commitments to be carried forward as part of this update. These reimbursements total $\$ 26.5$ million.

